DANISH FOREIGN OFFICE JOURNAL

NUMBER 33

1960

UNIVERSITY OF ILLINOIS
LIBRARY
SEP 7 1960
CHICAGO

BY APPOINTMENT
Purveyor of Cherry Heering to
His Majesty King Frederik IX

BY APPOINTMENT
Purveyor of Cherry Heering
to H. M. Queen Elizabeth II

BY APPOINTMENT
Purveyor of Cherry Heering to
H. M. King Gustav VI Adolf

BY APPOINTMENT
Purveyor of Cherry Heering to
H. M. the Queen of the Netherlands

CHERRY HEERING

WORLD-FAMOUS LIQUEUR SINCE 1818

During more than a century
selected Danish cherries
have added a special rich and fine flavour
to CHERRY HEERING,
a flavour which makes this
original liqueur outstanding
in taste and quality.

DANISH FOREIGN OFFICE JOURNAL

COMMERCIAL & GENERAL REVIEW

SAFETY ON THE JOB

The Danish Labour Inspection Service covers all employed persons except domestic workers and workers on ships and in aircraft. Safety at the workplace is a matter in which employers and employees have largely identical interests. By G. Drachmann ..... *page 11*

NORTH SLESVIG 1920–1960

The Versailles Peace Conference took account of a Danish claim for the revision of the Danish-German frontier in Slesvig under the principle of the right to national self-determination. Forty years have passed since North Slesvig was reunited with Denmark. The province has made sound social and economic progress and relations between the two parts of the population are good. By Svend Thorsen ..... *page 14*

OPERATING ON THE HEART

A new Danish heart-and-lung machine, extremely simple in design, has functioned during about a hundred operations. The part wich acts as lungs and blood vessels is so inexpensive that it is used for only one operation. By Erik Olaf-Hansen ..... *page 17*

A TUNE THAT HIT THE WORLD

A crime of passion which took place in Copenhagen a generation ago inspired a Danish composer to write the tango "Jealousy", a tune that has gone successfully round the world. By Karl Bjarnhof ..... *page 18*

TRADITIONAL AND YET MODERN YARD

Odense Shipyard, which has specialized in building tankers and has carried out a series of extentions and modernizations for this purpose, has established a new yard with facilities for turning out the ships of over 40,000 tons dead-weight which tanker owners now demand, in view of the immense post-war expansion. By Erik Ringsted and Iver Hoppe ..... *page 21*

BOOKSHELF ..... *page 24*

SECRET OF SUCCESS—EXPERIENCE

Danish cheeses display themselves on the counters of British grocers, in New York supermarkets, in West German stores, the luxury hotels of Buenos Aires, Lima, Hongkong, even on remote Pacific Islands and in Japan, to name only a few extremes. By H. Ellert ..... *page 25*

RULERS AND SET SQUARES

A Danish engineer began in his spare time to make templates for geometrical work. Later he opened a workshop, and now he has a factory which produces drawing articles for about 70 different countries. By Kristen Hesselager ..... *page 27*

SIDELIGHTS ON DENMARK ..... *page 29*

THE BACON'S STRIPES

Since 1958 it has been the practice in Denmark to brand each side of bacon with two stripes, running down its whole length. When the bacon is sliced the stripes leave the two patches that are seen on the edge of the rashers. By Knud Ravnkilde ..... *page 30*

The cover, by Alex Secher, shows marshlands in South Jutland (formerly North Slesvig) and relates to the article on page 14

NUMBER 33 . JUNE 1960

Numbered serially, irrespective of the year

PRINTED IN DENMARK

BY APPOINTMENT TO
THE ROYAL DANISH COURT

Hafnia
HAM

Hafnia

the world-renowned Danish ham!

HAFNIA KONSERVES A/S . COPENHAGEN

Manufacturers of all kinds of canned meat

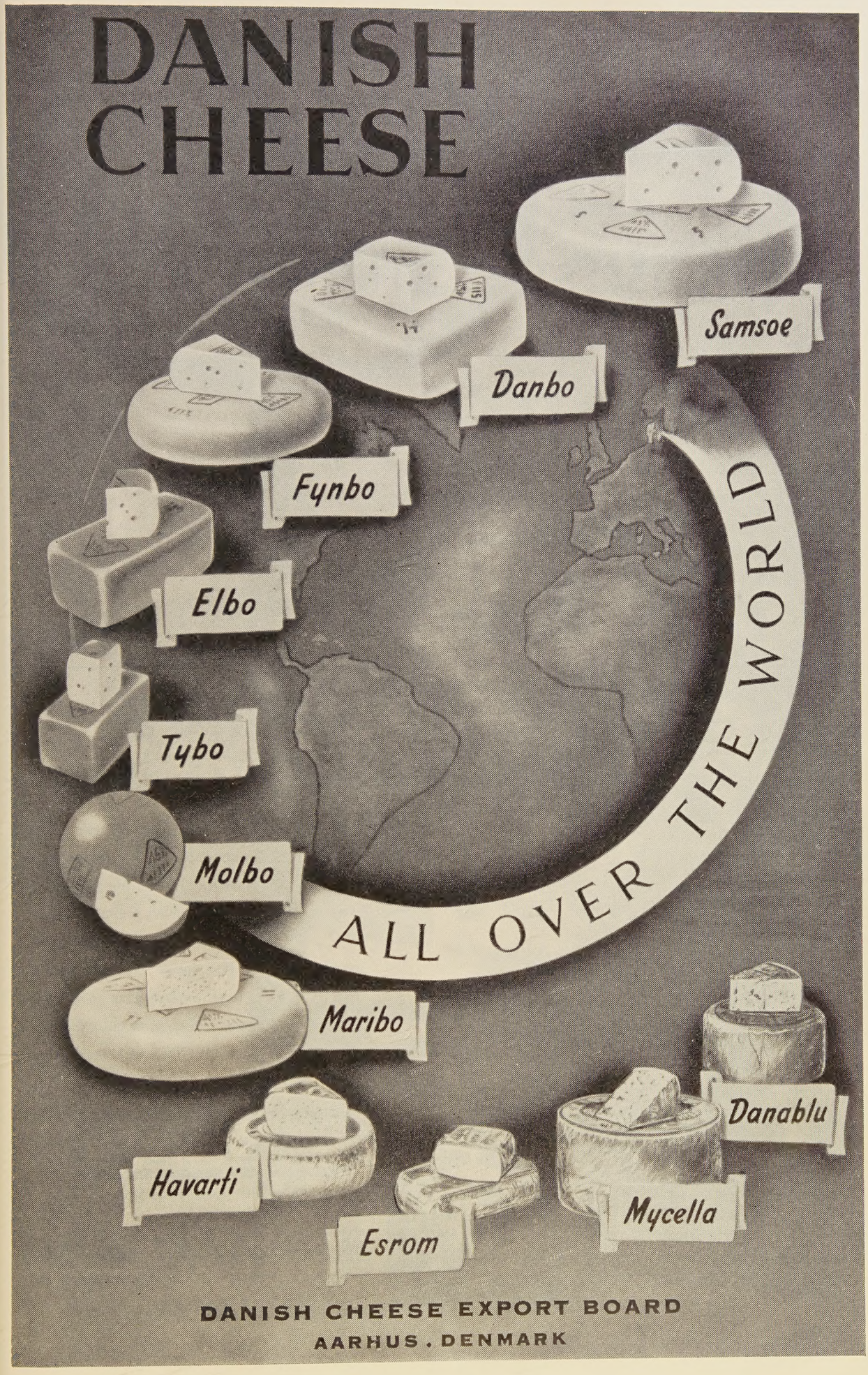
VIKING

DANISH STAR EXPORT BEER

★

BRYGGERIET STJERNEN
COPENHAGEN

Awarded the Prix d'honneur, Belgium, 1958


DANISH CHEESE
Samsoe
Danbo
Fynbo
Elbo
Tybo
Molbo
ALL OVER THE WORLD
Maribo
Danablu
Havarti
Esrom
Mycella
DANISH CHEESE EXPORT BOARD
AARHUS . DENMARK

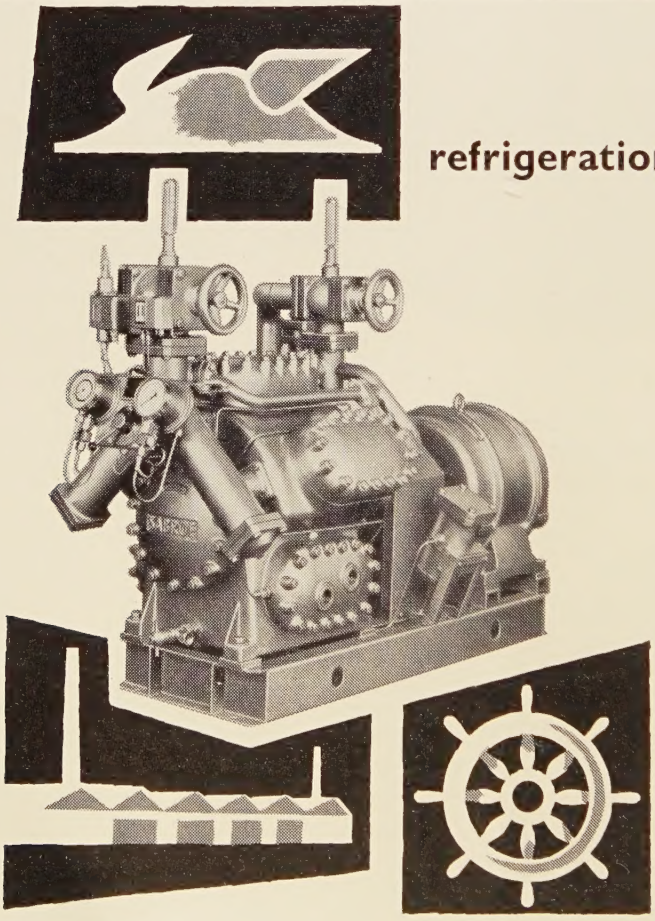
ODENSE STEEL SHIPYARD LTD.

ODENSE
DENMARK

Cargo Liners,
Fruiters,
Bulk Carriers and
Tankers
up to 100,000 t. d. w.

Telegrams:
"STAALVÆRFT"

Copenhagen Office:
8, Kongens Nytorv



SABROE

refrigeration knows no boundaries . . .

Wherever in the world you see the name SABROE, it signifies the safe solution of a refrigeration problem. It also means speedy contact with skilful engineers and technicians who are ready to solve YOUR refrigeration problems, too. For more than 60 years, SABROE have been amassing an invaluable fund of experience, which is at your disposal without any obligation. You only need to say

SABROE

- a name world-famous for refrigeration

Head Office and Works: Aarhus - Tel. (061) 3 63 66
Branches in Flensburg, Göteborg, Stockholm and Osaka. Dealers in 65 countries.

A dependable

key to

the Danish market

More than 100

branches

ready to serve you...

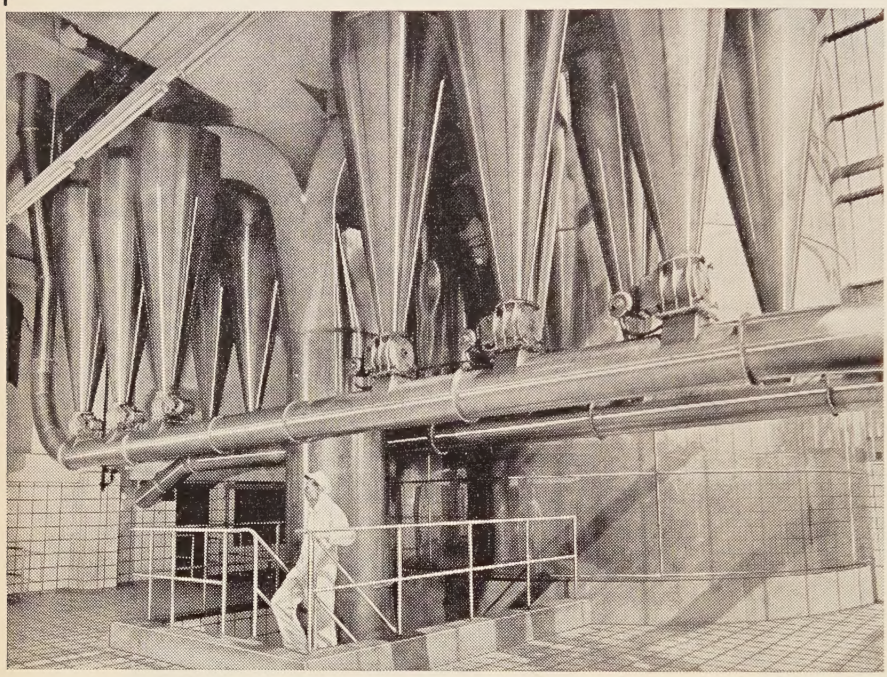
DEN DANSKE LANDMANDSBANK

Head Office: 12, Holmens Kanal . Copenhagen K

Cable address: »Landmandsbank« ⋆ Telex 2407 ⋆ Telephone: Central 6500

ANHYDRO

SPRAY DRYING PLANTS AND VACUUM EVAPORATING PLANTS



- the modern plants with the multiple advantages

ANHYDRO
Spray Dryer supplied to
Wilts United Dairies Limited,
Whitland, Wales.

Evaporating capacity: 3660 lbs/h (1660 kg/h)
Steam consumption*): 7329 lbs/h (3320 kg/h)
Power consumption: 25 kw.

*) including steam turbine driven fan.

One of the largest plants in the world!

ANHYDRO Evaporators and Spray Dryers are used all over the world for the drying of milk, eggs, blood, tanning extract, sulphite lye, kaolin, soap and detergents, and a great variety of other products within the food processing industry and the chemical and pharmaceutical industries.

ANHYDRO has supplied some of the largest plants in the world, and with the ANHYDRO plants the increasing demands for powder quality and production economy are met. For the production of powder products the ANHYDRO plants offer the greatest advantages, reducing production and maintenance costs. Brief retention time in the dryer, effected by forced removal, ensures high-quality products.

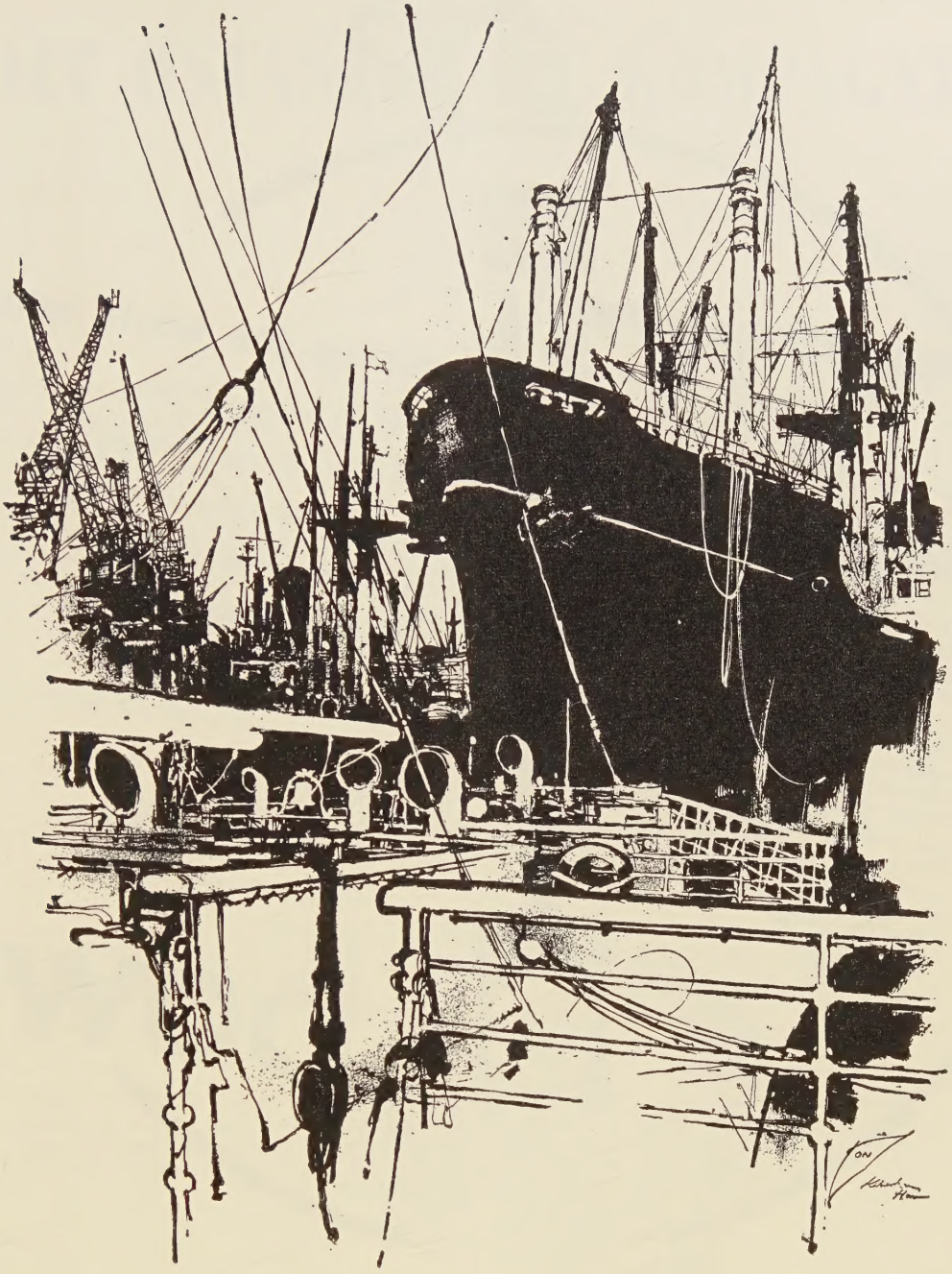
You have at your disposal the special know-how of our engineers, based on many installations in various industries. Please write for literature and further information.

ANHYDRO

- in use all over the world

Telephone: MINERVA 4767 - Cable address: ANHYDRO, COPENHAGEN

ANHYDRO A/S . 36, NORREGADE . COPENHAGEN . DENMARK



The Port of
COPENHAGEN

Transit Centre for Northern and Central Europe

FREE PORT

BURMEISTER & WAIN

Copenhagen Denmark

AKTIESELSKABET

DET ØSTASIATISKE KOMPAGNI

IMPORT OF OVERSEA PRODUCTS TO EUROPE.
EXPORT OF EUROPEAN GOODS TO ALL PARTS OF THE WORLD.
INDUSTRIAL PLANTS, PLANTATIONS, SAWMILLS AND FORESTRY IN ASIA, AFRICA, SOUTH AMERICA AND CANADA.

REGULAR SAILINGS TO AND FROM
CEYLON, INDIA, PAKISTAN, BURMA, MALAYA, INDONESIA THAILAND, VEITNAM, THE PHILIPPINES, CHINA, JAPAN, AUSTRALIA, NEW ZEALAND, NEW YORK, THE WEST INDIES, CENTRAL AMERICA AND THE PACIFIC COAST OF NORTH AMERICA.

OWN OFFICES: Argentina, Australia, Belgian Congo, Brazil, Burma, Cambodia, Canada, Colombia, Chile, France, Germany, Ghana, Great Britain, Honkong. India, Indonesia, Italy, Japan, Kenya, Laos, Malaya, Nigeria, Pakistan, Paraguay, The Philippines, S. Rhodesia, Ruanda Urundi, Singapore, The Union of South Africa, Tanganyika, Thailand. Uganda, U. S. A., Vietnam, The Virgin Islands.

THE EAST ASIATIC COMPANY

LIMITED

2, HOLBERGSGADE
COPENHAGEN, DENMARK

TELEPHONE: CENTRAL 8300
TELEGRAMS: ORIENT

DET FORENEDE DAMPSKIBS-SELSKAB

AKTIESELSKAB

(THE UNITED STEAMSHIP COMPANY, Limited)

COPENHAGEN

DANISH FOREIGN OFFICE JOURNAL
NUMBER 33 . JUNE 1960

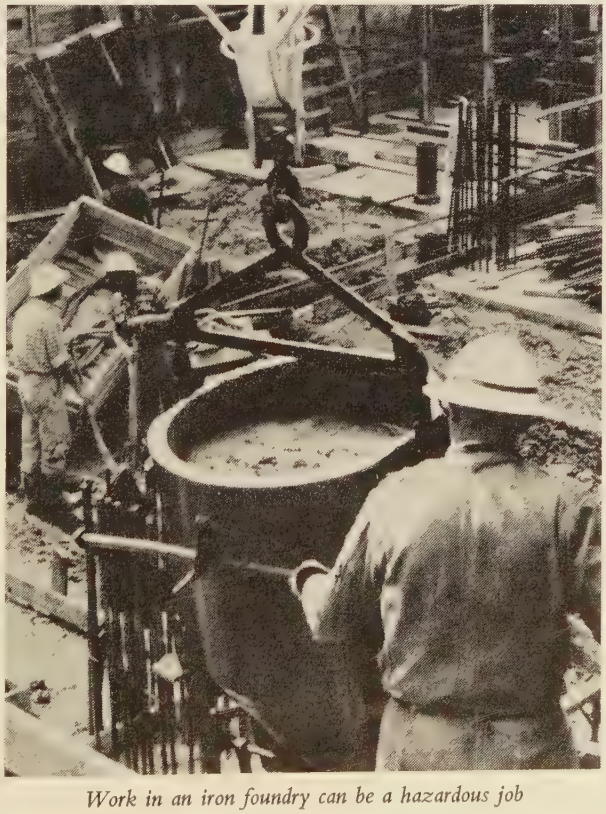
Safety on the Job

By G. Drachmann
Chief Inspector

The Danish Labour Inspection Service covers all employed persons except domestic workers and workers on ships and in aircraft. Safety at the workplace is a matter in which employers and employees have largely identical interests

The Danish Labour Inspection Service, established in 1873, was revised and extended in 1955, when the previous legislation was superseded by three new laws. Two of these apply, respectively, to workers in agriculture, forestry, and horticulture, and to shop and office workers. The third law, the main one, is known as the Law on General Workers' Protection.

Whereas the Factories Inspection Act of 1913, abolished at the same time, had placed the manufacturing industries and handicrafts at the centre, and made additional provisions for machinery safeguards, it is now the fundamental rule that all employed work comes within the scope of the Inspectorate, except domestic labour and work on ships and in aircraft.



Work in an iron foundry can be a hazardous job

Broadly speaking, it may be said that the regulations are least extensive in agriculture, forestry, and horticulture, and in the shop and clerical trades. In the case of the manufacturing industries and handicrafts, the new provisions involved a moderate revision. At the same time, the revised regulations were extended—for the first time—to the building and constructional trades, loading and unloading, and laboratory work. Some of the new provisions also take in hospitals, schools, theatres, etc., though with certain limitations on the requirements relating to the layout of premises in existing establishments.

The Danish Labour Inspection Service is highly decentralized. Greater Copenhagen is divided into three large districts, and here there are also special inspection arrangements covering boi-

King Frederik has followed the progress made in accident prevention. His Majesty is seen visiting a Safety First Exhibition

lers, lifts, and bakeries. The rest of the country is divided into 25 districts, each of them subject to a factory inspector assisted by one or more mechanical engineers; in seven of these districts one or more civil engineers are also employed.

As in a number of comparable countries, the main emphasis is on advisory and instructive services. The factory inspector seeks to get the law's provisions observed through explanation and persuasion, though under the law he may order an establishment—out of court—to apply the measures it prescribes. In the event of a prosecution for infringement of the law, it is the ordinary authorities that prosecute, not the inspector.

Medical Inspection Staff

At the same time as the rapid development of industry has brought new hazards (it must in fairness be added that it has also reduced earlier risks), the requirement that the individual work site should be both safe and healthy has been intensified. Conditions that were accepted 25 years ago, because they could hardly be otherwise, are not considered acceptable today, when we know more about the risk involved, and also have greater means of reducing it.

This evolution has entailed that modern factory inspection must have, not only inspectors as traditionally understood, but also works doctors having a special knowledge of factory welfare, and a laboratory able to carry out the required analyses—*e.g.*, of dust, noise, and concentration of injurious substances in the air—both mobile in the establishments, and in the laboratory.

In the revision of 1955, works doctors and the State Institute of Factory Welfare (Statens Institut for Arbejdshygiejne) were given statutory effect, and both form valuable components of the Factory Inspectorate.

Agriculture

Since the war, Danish agriculture has passed through a rapid process of mechanization. Horses have given way to tractors, simple and straightforward implements have been replaced by more efficient but more complicated machines.

This trend, which is still going on, involves more than an agricultural readjustment on the part of the individual farmer; as his investment in machinery grows, he must also, in his own best interests, honour the demands of his machinery for correct servicing and proper maintenance.

This process of adjustment too is well advanced; and it is, in many cases, accompanied by a necessary realization that machinery not only provides fresh opportunities of remuneration, but brings new hazards to farming hazards which the user of it must familiarize himself with in the interests of self-protection.

The Danish Labour Inspection Service also extends to

agriculture; and with the coming into force of the new laws a big educational campaign has been conducted among the farmers, with the collaboration of their associations, in order to reduce the number of accidents. For example, a leaflet providing instructions for the correct use of tractors has been distributed in 100,000 copies, that is to practically all tractor owners, and a new edition of 50,000 is being printed.

A number of countries, including the United Kingdom and the United States, have had successful experience of the introduction by firms of their own safety services.

Safety at the workplace is a matter in which employers, supervisors and workers have largely identical interests, and so it is natural—and essential for success—that an establishment's safety service should be based on an interested cooperation by these three.

Cooperation with Organizations

A number of large firms having voluntarily introduced safety services, these were in 1958 made compulsory in certain establishments, mainly large ones. While it is too early to say anything definitive about the result, it can already be stated that after the introduction of these services there has been a perceptible growth of interest in and appreciation of the problems of safety, and that this trend is reflected in a declining incidence of accidents in the establishment concerned.

It is an old-established tradition of the Danish Labour Inspection Service that it should be associated in its work with the two sides of industry—the trade unions and the employer associations—especially where it is a case of drafting general provisions covering an individual trade. The new law has legalized and extended this practice.

Information Service

It is a considerable help to the Inspectorate to be able to draw on the knowledge and experience of these organizations, the more so since provisions drafted in association with them can be laid down as matters of principle agreed upon by both sides.

Cooperation between the Inspectorate and the central associations of employers and workers has also been established in the field of information, as a Workers' Protection Fund, set up under the new law, is administered by a council consisting of representatives of the Inspectorate and the central organizations of workers and employers. The Fund publishes pamphlets, safety posters, and two journals, one of which appeals directly to the safety services. In 1958, the Workers' Protection Fund arranged a national exhibition of workers' protection under the patronage of the King, as well as the first Danish safety services congress.

The Fund's annual budget is modest in proportion to the tasks of an informational kind that it would like to set itself; nevertheless it is a valuable and essential supplement to the work done by the Inspectorate.

The mechanization of agricultural work has created new risks. Operation of combines and tractors requires special knowledge

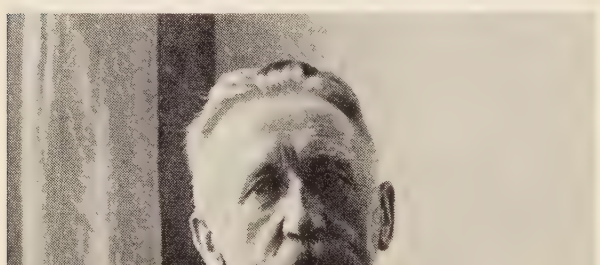
North Slesvig 1920–1960

By Svend Thorsen

The Versailles Peace Conference took account of a Danish claim for the revision of the Danish-German frontier in Slesvig, on the principle of the right to national self-determination. Forty years have passed since North Slesvig was reunited with Denmark. The province has made sound social and economic progress and relations between the two parts of the population are good

This year marks the fortieth anniversary of the reunion of North Slesvig, which was separated from Denmark by the war with Prussia and Austria (the Second Slesvig-Holstein War) in 1864. Then not only the German duchy of Holstein was ceded by the Danish monarchy but also the duchy of Slesvig, where in the northern part the population was pro-Danish. War broke out between Prussia and Austria in 1866, and in that year the duchies were united with the victor, Prussia.

Article Five of the Treaty of Prague (1866) declared that the northern districts should revert to Denmark if in a freely held plebiscite the inhabitants voted for reunion. Though the provision was annulled in 1878 the pledge was of moral value to the Danish element, and shortly before the German collapse in November 1918 H. P. Hanssen, the North Slesvig member of the Reichstag, calling attention to Article Five, demanded that the frontier should be drawn on the lines of national self-determination. This was one of President Wilson's 14 Points.



H. P. Hanssen (1862–1936)

The demand was granted by the Versailles Peace Conference, which divided the plebiscite area into two zones, North Slesvig and Central Slesvig. While North Slesvig was regarded as a unit, its nationality to be determined by simple majority, Central Slesvig, including Flensburg, would vote by local district, so that in drawing the frontier regard could be paid to local national outlook.

The plebiscite in the former, Zone One, comprising an area of 4,000 square kilometres (1,500 square miles) with a population of 170,000, took place on February 10, 1920. The Danish vote was 75,000, the German 25,000. The vote in Zone Two, on March 14, was 52,000 for Germany and 13,000 for Denmark, the respective figures for the town of Flensburg being 27,000 and 9,000. The International Commission which had controlled the plebiscites then recommended that the whole of Zone One, but no more, should go to Denmark, and the recommendation was accepted by the Council of Ambassadors in Paris. The formal Reunion Day was June 15, 1920. The area reunited with Denmark was predominantly agricultural. Large sections of the rural population were pro-Danish. The towns were small and before 1920 the Social-Democratic Party had made comparatively little headway.

Frontier of Sympathy

Denmark had shown moderation. By historical, democratic, and Christian ways the Danes had reached the standpoint which in 1920 was the definitive one, and which may be called the frontier of sympathy. Perhaps for the first time in history the stronger part in an act of high politics had refrained from doing unto others what it would not have they should do unto it. North of the Kongeå—the stream which formed the frontier of 1864—one might see in all humility confirmation of the value of the Danish way of life in the fact that three-fourths of the voters of North Slesvig had declared themselves Danes. In the same spirit in which the new frontier was drawn, the German minority that now found itself in the Danish State was legally guaranteed every opportunity for the free manifestation of its national life.

In retrospect the reunion of 40 years ago, viewed as a democratic process of development and not merely as a change of frontier, involved more problems than were then perceived. Alongside the pro-Danish and the pro-German inhabitants there was also a group whose national sympathies vacillated. According to a German assessment,

"Det unge Grænseværn" (Young Frontier League), meeting at Dybbøl in 1933, rallied the Danish democratic forces against Nazism

it comprised about 50,000 persons. This estimate is, however, far too high. The group, which voted Danish in 1920, was a problem in the twenties. The political leadership of the German minority hoped to win or recapture these people for the German group, so as to create a broad basis for its claims to a new frontier revision.

Post-War Impoverishment

Another national political problem of about the same order was presented by the labour movement of the province. Though a large minority of the working class was pro-Danish, the leadership of the Social-Democratic Party of North Slesvig up to 1920 was pro-German, and some Danes feared that the growing Social-Democratic movement would prove politically neutral.

In 1920, however, the party branches joined the Danish Social-Democratic Party, the local Member of Parliament, J. P. Nielsen, who had immigrated from Denmark, rapidly gained an acknowledged position, and the difficulties of adjustment were surmounted.

The account of events in North Slesvig in the 40 years that have passed since the plebiscite is almost identical with the trend of development in the two mentioned particulars.

The territory which reverted to Denmark in 1920 was impoverished by the wartime over-exploitation of capital resources and the diminution of capital brought about by the runaway German inflation. The impoverished province was now visited by crises, first an internal Danish slump in 1925–26 and then, after 1931, the world depression which hit agricultural Denmark with exceptional force. The considerable financial support rendered by the Danish Government, including 63 million kroner for the conversion of almost valueless marks, constituted an effective aid. But it could not restore the past prosperity, to which German agricultural protection had contributed. North Slesvig had experienced the boom while part of Germany; the depression it had to share with Denmark.

The serious consequence was that various 'movements' arose among sections of the farming community. Dissatisfaction was fanned from south of the border, in the hope that many farmers might be nationally neutralized, to form provisionally a bloc between Danes and Germans; by means of money from Berlin endeavours were made to transfer farm land to German ownership, unquestionably with a view to a later change of frontier. Through a variety of generous legislative measures and the initiative of North Slesvig Danes themselves, however, such a vigorous counter-thrust was launched that the national foundation on which the reunion rested was never really shaken.

In spite of the prolonged poor economy, every day after 1920 saw the death of a part of Prussia and the revival of a piece of Denmark. The national basis was seen to be Danish. Schools were shown to be the best gift of the reunion. All children now came under the influence of Danish culture, which during the foreign domination had reached only a small minority able to attend schools north of the border. As the years passed, a generation grew up with its face turned fully towards Denmark. And North Slesvig gradually changed in appearance owing to roadbuilding, land parcelling, harbour extensions, drainage, planting, and electrification; supply mains connected many new homes. Local self-government, unknown in the German period, stimulated considerable self-activity among the people.

1920 Frontier Recognized

It was also fortunate for Denmark that the local Social-Democratic movement did not become a nationally neutral element, let alone a pro-German one. The unreserved endorsement by the German and Danish parent parties of the right to self-determination implied recognition of the 1920 frontier. Danish social legislation also meant, on the whole, a great advance for the working

King Frederik and Queen Ingrid spend their holidays at Graasten Palace every summer. Here they are being received by County Prefect Refslund Thomsen on their arrival in Sønderborg

classes, and the pro-German workers, especially when the times got worse for their fellows in Germany, fully learnt to appreciate the freedom they had in Denmark.

Hundreds of workers who in 1920 had voted to remain German did not fall to the German camp, as might have been feared at the time of the reunion, but settled down in the Danish Social-Democratic Party, after the advent of Hitler in 1933 even thankfully. At the election the year before, the party, now clearly Danish in its leadership, had emerged as the largest party in the province. The Social-Democratic groups in the borderland had become an integral part of the Danish labour movement.

The Conclusive Test

At the general election in April 1939, when Nazi Germany stood at the zenith of its power, shortly after Austria, Czechoslovakia, and Memel had gone '*heim ins Reich*', came the conclusive test. The election in North Slesvig proved indeed a plebiscite. Confronted by the associated Danish parties, the German party obtained 15.9 per cent of the votes. Nazi propaganda had failed for the first time in Europe. The frontier had been confirmed under far more difficult conditions than when it had been drawn after the original plebiscite. Essentially, Denmark had won the battle for the waverers (the so-called 'third Slesvig') and the German-oriented workers. What Denmark under favourable conditions had gained in support from the new circles after Germany's first collapse had been consolidated.

Declaration of Loyalty

After the Second World War, which only united North Slesvig even more closely with Denmark, so closely indeed that the unification of the two is now complete, the German minority seems to have stabilized its position at around 9 per cent of the population in the province. In 1945, for the first time since the reunion, the minority made a declaration of loyalty to the Danish State on the basis of the 1920 frontier. In the fortieth anniversary year the relations between the two sections of the population are good.

Important problems remain to be solved in North Slesvig, especially concerning the economic development of the province, but none of these compares in magnitude with those which existed when the war-stricken northern part of the old duchy was reunited with Denmark after losing nearly 6,000 of its men.

Forty years after, the reunion of North Slesvig in 1920 may be regarded as one of the few cases in which history has made a final settlement.

Operating on the Heart

By Erik Olaf-Hansen

A new Danish heart-and-lung machine, extremely simple in design, has functioned during about a hundred operations. The part which acts as lungs and blood vessels is so inexpensive that it is used for only one operation

Surgeons in all parts of the world are using machines which during operations can function for the heart and lungs. Most of them employ a highly involved apparatus, but now in Denmark excellent results have been achieved with an appliance striking in its simplicity and cheapness. The part which functions as lungs and blood vessels is made of plastic, and is so inexpensive that it can be thrown away after use. At the same time there is a considerable saving of cleaning expenses.

The Danish heart-and-lung machine has now functioned during a hundred operations, and it has gained the confidence of doctors by its great stability. It has been introduced by Professor Frederik Therkelsen in one of the surgical departments for diseases of the heart at the National Hospital in Copenhagen. Requiring a heart-and-lung machine a few years ago, Professor Therkelsen came to the conclusion that none of those on the market was altogether satisfactory. In the department there was a young doctor, Dr. Inge Rygg, a Norwegian by birth but now a Danish citizen. He began to study the idea of a machine that would be simple in construction. The cooperation of a technician, Mr. Erik Kyvsgaard, was sought.

Suit-case Size

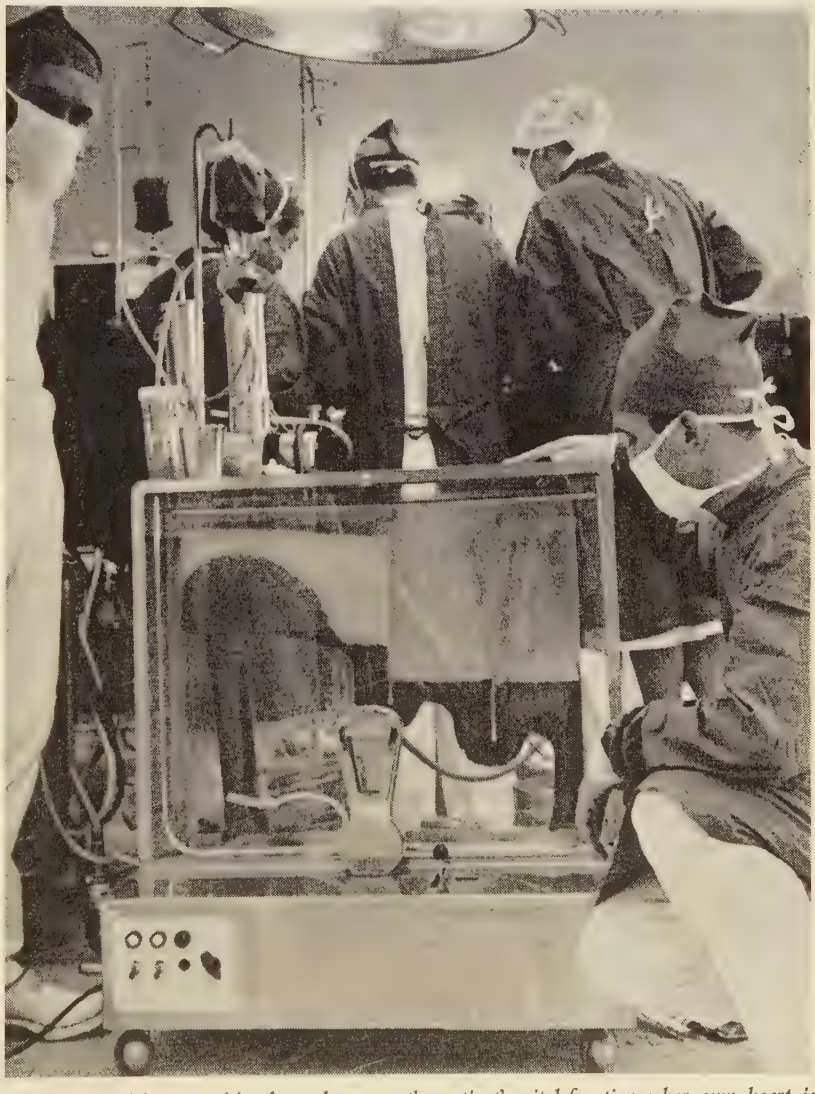
The new heart-and-lung machine has the size of a biggish suit-case. It is employed during operations in which the surgeon has to repair injuries inside the heart itself. The heart has to be opened in the operation, and so is unable to pump blood round the organism. Nor does the blood reach the lungs to be oxidized. These vital life-preserving processes are taken over by the machine.

When an operation is to be carried out, the large veins of the heart are connected by means of two plastic catheters and a plastic tube with the heart-and-lung machine. The blood falls by its own weight and flows into the artificial lung, which is little more than a plastic bag suspended from a weighing machine. By this means it can be seen from the scale of the weighing machine if the normal volume of blood continues to circulate through the organism.

Before the patient's blood is led into it by slowly ligaturing the veins, a few pints of blood are put into the machine. Otherwise the re-pumping of blood to the patient could not begin simultaneously with the flow of blood to the machine. The blood that is put into the machine is freshly drawn. The reason for this is that blood from a blood bank has added preservatives, and blood which is to flow through the machine must have an anti-clotting substance added to it. This procedure, which excludes complications, requires blood taken direct from the donor.

Seven Pints a Minute

The plastic lung through which the blood is led is so designed that no damage is caused to the rather delicate blood cells, and filters ensure that the air which



The heart-and-lung machine has taken over the patient's vital functions: her own heart is inactive, her lungs are collapsed and her blood is flowing through the apparatus. Dr. Ryg is squatting in front of it while surgeons are seen working on the exposed heart behind the machine

bubbles up through the blood to oxidize it is not returned to the organism as air bubbles.

At a word from the surgeon, the machine is set in motion. During the first few moments there is a little circulation, both through the organism by the action of the heart itself, and through the machine. But the machine quickly takes charge of the whole circulation. The dark blood from the arteries can be seen to enter the artificial lung, to be oxidized and grow lighter in colour; and finally an ordinary electric pump drives the blood vigorously back into the patient through a plastic catheter inserted into the artery in the patient's thigh. Every minute seven pints of blood pass through the machine. While the machine is functioning, the patient's blood pressure is kept constant at around 75.

The moment the machine takes over the oxidation and pumping of the blood, the anæsthetist withdraws. The patient's lungs have now been collapsed. The heart is working but is virtually emptied of blood, thus enabling the surgeon to open it and inspect the damage, which must either be stitched or repaired by means of a plastic prosthesis. The small amount of blood present is just sufficient to supply the tissue of the cardiac muscle, and is drawn off by an assistant surgeon with an ordinary operating pump.

A Team of 14

There is really no limit to the length of time that the machine can perform the functions of the patient's heart and lungs. During operations so far it has worked for periods of from 20 minutes to an hour and a half. When the operation is completed, the connections with the machine are gradually ligatured, and the patient's own heart and lung resume their normal functions, under the supervision of the anæsthetist.

An operation of this kind requires a team of 14 doctors and nurses, some for the operation and the narcosis, some to attend to the machine and a special apparatus for ensuring that the pressures in the organism are kept in order.

After the operation all plastic parts are thrown away, so that everything which comes into direct contact with the patient is entirely new and sterile at each operation. The Danish machine is being used so far at various hospitals in Denmark and Sweden, but as operations which used to be impossible—or at any rate extremely difficult—have now been made safe by its means, it is expected that it will soon be in use all over the world. Many visiting doctors who have seen the machine at work during operations at the National Hospital have extolled its brilliant simplicity, which at the same time is a guarantee of safe functioning. It may well be claimed that nowhere is there another heart-and-lung machine that has solved so cheaply and so simply this complicated problem.

A Tune That Hit the World

By Karl Bjarnhof

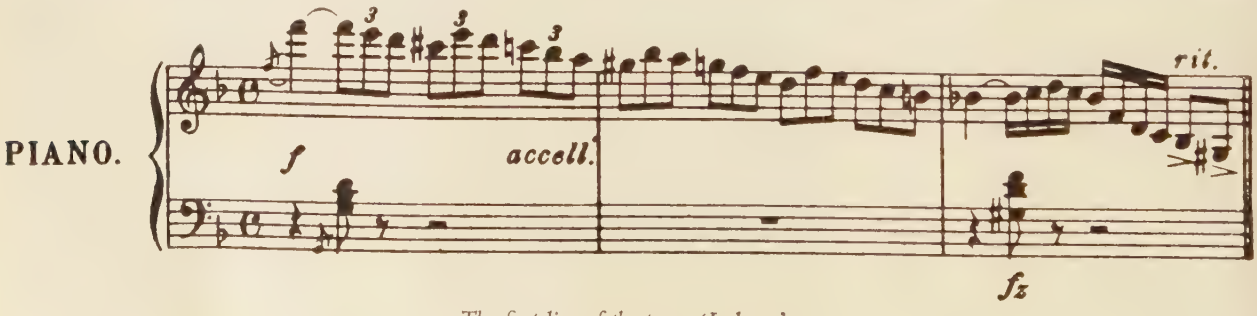
A crime of passion which took place in Copenhagen a generation ago inspired a Danish composer to write the tango 'Jealousy', a tune that has gone successfully round the world

At Thorøhuse, an idyllic Funen locality near Assens, lives Jacob Gade, the Danish composer who more than any other has achieved world renown in his own lifetime.

His reputation is chiefly based on a single work—which seems unfair, seeing that many another equally tuneful, equally brilliant, equally catchy, has come from the same hand and music pen. Undoubtedly, also, they have travelled far; yet nothing he has written has compared in popular favour with his tango 'Jealousy'. It exists in arrangements and adaptations without number—even to himself. For confirmation one need only refer to the catalogues of international publishers and gramophone companies. It has been recorded by the most celebrated orchestras and conductors—from Toscanini down the international scale.

Mastery of Tone Language

Every well-known—and unknown—light orchestra has it in its repertory. One can hear it played by a solitary, fervent violinist in a café in Mexico City—or by a sailor



The first line of the tango 'Jealousy'

The composer at his desk

with his accordian full of homesickness on the deck of a freighter on a peaceful evening in an Adriatic port. And while it may be known that this 'Jealousy' is the work of a man with the unusual-sounding name of Gade, scarcely anyone in the world at large connects the name with Denmark. Most people no doubt imagine the author as being from Latin America or the Romance part of Europe. And this is no hypothesis. It is an experience many a Dane abroad has had, when with national pride in his heart he has asked the conductor on the platform, the radio announcer, or the assistant in the gramophone shop. Jacob Gade Danish—impossible—Argentine perhaps—Italian—Frenchman or Spaniard! Denmark is a land of bacon and butter, where red and black-and-white cows stand knee-deep in grass and where every pig is nursed. But the tango comes from other latitudes, and when moreover it is dramatic, on the theme of jealousy....

One may wonder that a man who—like Jacob Gade—is Danish to the core, that such a man when setting pen to paper and writing music should strike a note which is so international that in many countries it is taken to be national. To musicians, however, there is nothing incredible in the phenomenon. They also know that it is due neither to black magic nor to accident, but is simply a manifestation of supreme mastery of tone language, and musical dialects one might even say. And to a capacity for changing not only tongue, but mentality.

Of Musical Family

Jacob Gade comes of a Jutland family of fiddlers. He was less than ten years old when his father began taking him to dances and country feasts, where he was allowed to play second fiddle. This early developed his harmonic sense, his ear, for what suits and sounds well on the instrument. His musical experience was founded then, and the features that were to become characteristic of him began to emerge. Later, at the age of fifteen or sixteen, he left home. Copenhagen was the magnet. Also because he realized that he had to get himself a schooling, real training as a musician.

Incidently, he was successful even in these first years, as he has been on a varying scale all his life. If there had been something of the farmer's boy in him, he soon grew out of it. He taught himself manners, became gradually a man of the world without sacrificing the real thing, his originality. And he became a violinist—on the large, the virtuoso, scale. In my book *The Stars Grow Pale* I have described a meeting with him at that period of his life. It was my encounter with the unattainable, with art itself.

The Inspiration

Then he disappeared to America, and was away for some years. When he returned it was as a conductor. Till the silent films ceased to be he conducted the most celebrated light orchestra in the Copenhagen of those days, that of the Palads Theatre, and it was then he wrote 'Jealousy'.

He was living at the time in an old mill at Tibirke in the North of Zealand, and there one morning he read in his newspaper about a crime of passion. He has told me of the deep impression made on him by the tragic account,

written in matter-of-fact reporting style, of a man who, tormented for long periods by an unfaithful mistress, finally puts his hands round her throat and strangles her.

But music does not have the means to describe directly a dramatic course of action. At the same time, nobody will deny that it can reflect a state of mind; and that is what happened.

No one then thought that the tune would be played by anybody but Jacob Gade.

At first it looked as though the sceptics would be right. Acceptance was rather slow: among other reasons because this violin *cadenza*, which could perfectly well have been incorporated in one of the great Romantic concertos, could not be played by anybody. Yet it was rumoured that it was used now here, now there; for it also had a brilliance that no competent violinist could withstand.

Jacob Gade himself—on the other hand—has never been one for lingering long over a work he has finished. It may be too much to say that from time to time he forgot 'Jealousy', but at any rate he went on writing, still cultivating the lighter muse.

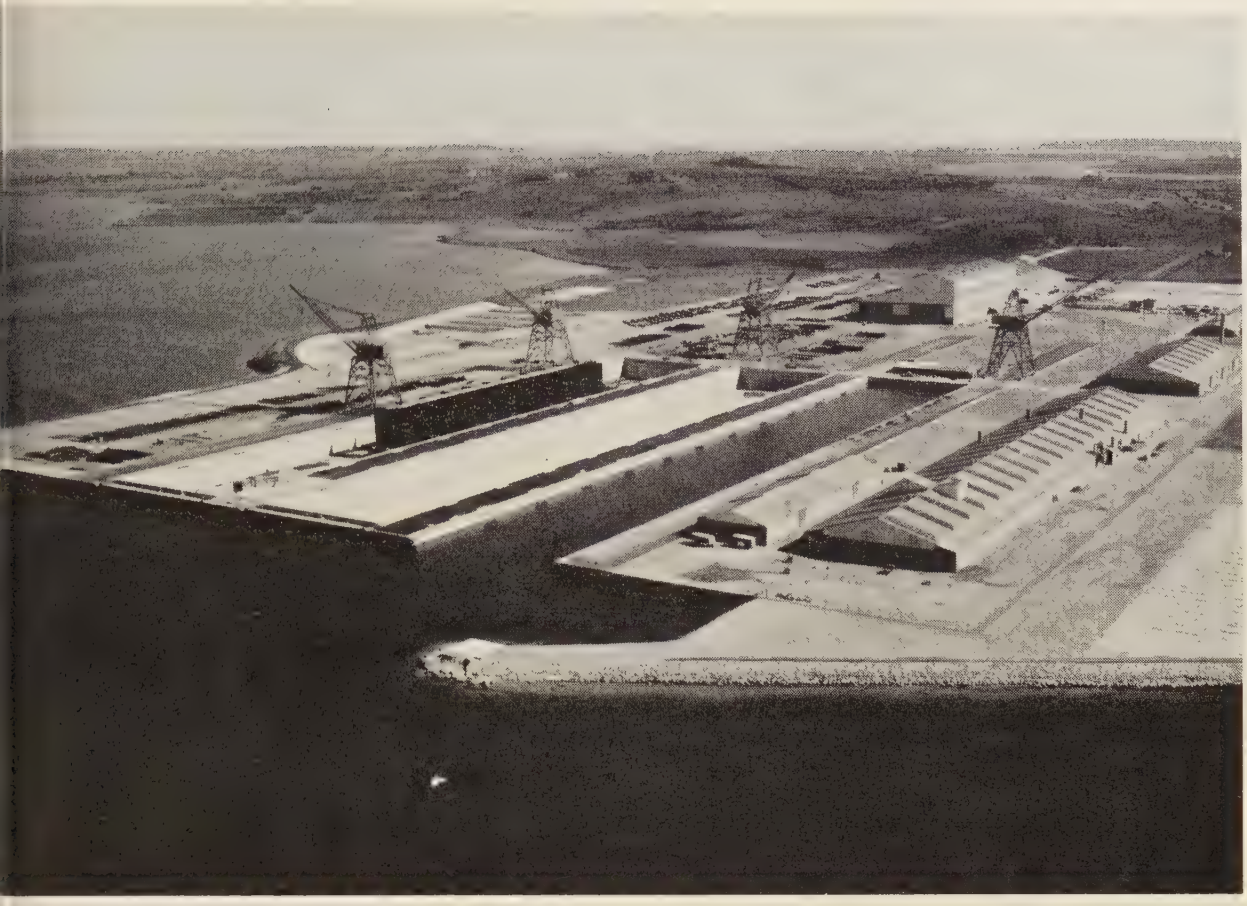
Sudden Riches

Ten to fifteen years passed before 'Jealousy' gained recognition and succeeded in earnest outside Denmark. Actually it was during the 1914–18 war, and in the meantime Gade had been put out of business as a musician. The sound film had long since superseded the silent films. There was no need for a conductor. The small orchestras of the large restaurants also got fewer and fewer. In 1939 he was sixty and retired to the cottage near Assens. He calculated that, all in all, what he had written would provide him with a quiet and modest retirement. No one, as far as that goes, thought he was making a wrong estimate. But in 1945, when the war was over, the picture completely changed. Royalties came to him from all the major countries, and everywhere the amounts were in six figures. In the course of a few months he was a rich man.

Fund for Young Artists

Mimi was Jacob Gade's wife. She died before the golden stream had begun to flow in earnest. Now he lives alone—literally alone—at Thorøhuse. And when at home he will often sit at his radio. If he turns the knob, there will not be a single evening when he cannot, from one station or another, hear his tango 'Jealousy'. And he has long since ceased to follow the steady rise of his bank account. But he has done something else: he has donated all his royalties after his death to a fund for assisting young artists during their studies. For he has not forgotten what it was like having to find the means for his own training.

The idyllic setting at Thorøhuse on the island of Funen, looking across the Little Belt



The Lindø Department of Odense Shipyard Ltd., situated on the small spit of land called Lindø in the Odense Fjord

Modern and Yet Traditional Yard

By Erik Ringsted and Iver Hoppe

Odense Steel Shipyard Ltd., which has specialized in building tankers and has carried out a series of extensions and modernizations for this purpose, has established a new yard with facilities for turning out the ships of over 40,000 tons deadweight which tanker owners now demand, owing to the immense post-war expansion

Odense Steel Shipyard's Lindø Department was opened recently in the presence of a number of distinguished guests, including prominent Government and business representatives.

By the summer of 1959 the keel had been laid of *Lindø No. 1*, a new ship which in the near future will grow into a 48,600-ton supertanker, 229.5 metres long, 31.4 metres broad, and 27.7 metres from keel to deck. The capacity of the new department allows for even greater dimensions, however, and will enable Denmark to build her share of the great new ships to come, measuring up to 100,000 tons deadweight.

To remain fully competitive the Odense yard had no alternative but to open this new department. The choice of situation fell on the small spit of land called Lindø in the Odense Fjord, about 15 kilometres (10 miles) to the north of Odense. The final decision to embark on the new project was made in April 1957.

One of the reasons why Lindø was chosen was the firm subsoil, which enabled the two immense slips and fitting-out docks to be constructed to a very simple and practical design. Other reasons were the deep water right in to the shore, and the excellent means of communication with the main yard at Odense.

A quick start was made in the spring of 1957 on the approximately 110 hectares (275 acres) of land that had been acquired, and in time 500–600 men, assisted by excavators, cranes, tractors, trucks, etc., were on the job. The work made speedy progress; in November 1958 it was possible to hold traditional Danish celebrations when the final roof-beams were erec-

Aerial view of the new village at Munkebo

ted on the 25-metre-high welding and shipbuilding shop; in June 1959 a start could be made on building the first supertanker, *Lindø No. 1*; and in 1959 the yard was formally inaugurated.

Among World's Biggest

The Lindø yard presents in many respects the appearance of a traditional and yet modern yard, built "in depth". There is provision for later extensions, should they be required. In its present form it could employ close on 2,000 workers and technicians.

The focal point of the new yard is formed by the two slips, which, measuring 300 by 45 by 9 metres, are among the biggest in the world. A ship is launched by simply letting water into the slip, which is situated at right-angles to the shore, and pulling the slip gates aside so that the ship can be manouevred out. The ship is then towed into the fitting-out dock, where the machinery and other gear are installed.

The yard has every modern aid at its disposal. For example, in marking out steel plates and angles it employs the new optical marking out, which dispenses with the full-sized templates formerly used. The actual cutting of plates is carried out by means of burning machines, which perform the process very rapidly. Complicated sections are cut by means of a Sicomat burning machine, with a cutting flame that is fully automatic-controlled.

Cranes with Short-wave Radio

In the welding and shipbuilding shop, which is 60 metres wide and 216 metres long, ships' sections up to 50 tons are assembled and then, on special trucks, taken out to the laying-down site outside the shop. The onward transport to the slips takes place by means of four 50-ton turret cranes. For very heavy machine parts or specially large sections, the four cranes can be concentrated along sidings at the same slip or dock, and used to lift a combined weight of 170 tons. For co-ordinating the manouevres of the crane drivers, the drivers' cabins are equipped with short-wave radio.

Housing for Employees

The yard has been at pains to provide the best possible working conditions for all its employees, both in and outside working hours. There is an up-to-date canteen with ten self-service counters and baths with 140 showers.

An important part of the amenities, and a chapter on its own, is the housing estate which the yard is building for its salaried and wage-earning staff. In and around the village of Munkebo, which to begin with had about 350 inhabitants, the subsidiary company of Ejendomsselskabet Lindø A/S (The Lindø Building Society Ltd.) has acquired 140 hectares (350 acres) of land for house-building, chiefly on the south and west slopes of the 60-metre-high Munkebo Hill. Layout and building plans have been drawn up in close association with the local and central Government authorities and will ensure both variation and planning, while considerable areas surrounding the estate will be laid out as a green belt, the country landscape with trees and gardens being preserved.

Typical Rural District

So far, about 175 dwellings have been completed, and a further 250 should be finished during 1960. The great majority are family houses with gardens. For the

lke of variation, different housing types re being built, imcluding flats of one, wo, and three rooms.

While the choice of Lindø for the yard as obvious, the housing site was less asy to decide. The modern amenities hich are a requirement of present-day ouse-building were not available when ne areas were acquired. Munkebo was a ypical rural district with many family arms.

Before building could begin, it was nerefore necessary to carry out many neasures which in modern house-uilding projects are not normally—at east to any large extent—the business of rivate enterprise: complete sewerage with the necessary purifying plant for hose areas where building was projected; rovision of requisite water supplies by nstallation of mains from Odense to Munkebo and the estate; construction of district-heating centre and the laying-own of pipes in streets and roads; big xtensions and improvements of public oads; supply of electricity and many ther things.

Problems for Local Authorities

In addition to all this it was necessary o provide a town and shopping centre, n order that the inhabitants of the future Munkebo would have access to the usual acilities of a modern community: shops f all kinds, banks, a cafeteria, meeting nd party rooms, parking spaces, clinics, offices, and so on. Special bus connections o Odense and Kerteminde have also been stablished.

Munkebo is now developing well; at he present rate of building, it is expected hat in a few years' time it will have some ,000–4,000 inhabitants—a tenfold in-rease on the present population. In order to stabilize the development, efforts are being made to draw industrial nd craft establishments to the district.

The big expansion in the district has obviously created many new problems or the local authorities and previous nhabitants. Cooperation between autho-ities, yard, and building subsidiary has ucceeded in surmounting the difficulties o far, and this explains why both the new work-place at Lindø and the new housing ommunity at Munkebo have been reated in so short a time and are already hriving so well. Cooperation by all con-erned will be needed in the future, in order to enable the new establishment to maintain full employment in the face of increasingly severe international com-petition in building the giant ships of the future.

Top: Most of the dwellings for manual workers and salaried employees are one-family houses with gardens. Bottom: The shopping centre gives the village of Munkebo an urban look

BOOK SHELF

Five Modern Democracies

Scandinavia Past and Present. Arnkrone Publishers. Copenhagen, 1960.

Since the war a stream of gifts has gone out from the United States, bringing unique and magnificent aid to the rest of the free world. Without this aid Europe would not have recovered so quickly and so well, if at all.

Millions of Europeans acknowledge this debt to America and are glad to express their gratitude. One of them is a Danish publisher, Edvard Henriksen, who had the idea that Scandinavians should do so visibly in the form of a book. This should present Scandinavia past and present, should be written by leading Scandinavian specialists, and should be as worthily produced as possible. Such a work required an economic foundation, and Mr. Henriksen secured this by enlisting the patronage of prominent institutions and firms throughout the Northern countries. A list at the beginning of the third volume indicates the success. A group of lawyers formed the board of control, and an editorial committee was drawn equally from the five countries.

The result of all this is now available in the handsome work, *Scandinavia Past and Present.* It is in three volumes of over 2,000 double-columned, wide pages, finely printed and beautifully illustrated. The first volume sketches the history "From the Viking Age to Absolute Monarchy"; the second volume is subtitled "Through Revolutions to Liberty"; the third, and weightiest volume describes "The Five Modern Democracies". Leading specialists in the North have surveyed Scandinavia historically, culturally, economically, and socially from prehistory down to the present day. I doubt if any other existing work contains so much information about the Northern countries, collated and systematically presented so that the common character and unified picture are made plain.

Scandinavia Past and Present, in an edition of 3,000, was handed over to the United States Ambassador in Copenhagen, Mr. Val Peterson, at a reception in the American Embassy, when the Icelandic Ambassador to Denmark and former Prime Minister, Mr. Stefan Johann Steffansson, spoke on behalf of the Northern countries. Expressing his thanks after the presentation by Mr. Henriksen, the American Ambassador announced that the first copy of the work would be presented to President Eisenhower.

A foreword explains the background to this unusual enterprise and the spirit which inspired the patrons of the work—representatives of the Royal Houses of Scandinavia, Prime Ministers, and leading personalities in all the countries—the contributors, and the editors. "The guiding idea behind *Scandinavia Past and Present,*" it says, "has partly been to create a tangible expression of the gratitude which Scandinavian peoples feel towards the United States because of what that country has meant during and after the last war, and partly to produce a work which tells the comprehensive story of Scandinavia—past and present."

The twofold purpose has been achieved in a worthy and a handsome manner. Wherever this work finds its way, in English-language libraries and cultural institutions, it will spread a knowledge of the North and serve as a reminder of Scandinavian gratitude to the great free country of America.

Hakon Stangerup, Ph. D.

The work was presented to Mr. Val Peterson, the U. S. Ambassador to Denmark, by publisher Edvard Henriksen. Between them is the ambassador of Iceland, Mr. Stefan Johan Stefansson, who spoke on behalf of the Nordic countries

A table laid with Danish cheese, including Danablu

Secret of Success - Experience

By H. Ellert

Danish cheeses display themselves on the counters of British grocers, in New York supermarkets, in West German stores, the luxury hotels of Buenos Aires, Lima, Hongkong, even on remote Pacific islands and in Japan, to name only a few extremes

Little Denmark is today the third largest exporter of cheese in the world. One or two figures will illustrate the position. In 1939, about 10,000 tons of Danish cheese was exported; in 1959, about 70,000 tons. Over a hundred markets in all parts of the world take it. This is success indeed, even at a time when many export records are being made.

Danish cheese is enjoyed in jet airliners speeding over continents, and in the captains' cabins of cargo ships beating their way across the seas. What is the secret of this modern Odyssey of cheese, which has chiefly established contact between the Danish dairy industry and consumers in the industrial cities of Europe? In overseas countries the cheese is principally sold as a speciality esteemed by connoisseurs, who say with a well-known French gastronome: 'A meal without cheese is like a woman with one eye....'

Modern Dairies

Part of the secret is simply that the Danes like making cheese. The production is based on generations of experience, applied in modern dairies and creameries with up-to-the-minute technical facilities. They are places of shining tiles and stainless steel, and mechanical 'arms' stirring the curds. But more than mechanical aids are involved.

Every creamery has its secrets which are carefully guarded. It takes a little mystery to bring out the right flavour, to get the bacterial culture to thrive; but let us not forget that the Danish dairy industry has a large staff of scientifically trained cheese experts who act as technical advisers. Quality and hygiene mark Danish cheese-making at all stages.

Supervised Production

The raw material is the fine rich milk from a million and a half Danish cows, which annually produce five million tons of milk. The Danish dairy cow, popularly known as Karoline, is nursed and tended. The Danish dairy industry may have got further than any other in the campaign

against contagious cattle diseases, waged under the slogan Sound Milk from Sound Cows. By 1952 it could be proclaimed, in a ceremony in Parliament, that the dreaded insidious tuberculosis had been stamped out among cattle.

Recipes Brought Home

A trade body independent of the Government closely supervises the cheese production all the way from the dairy to the point when the finished cheeses leave the country in export ships or southward-bound refriger ator vans. All this gives the purchaser confidence.

The Lur brand is the industry's quality mark. If a creamery neglects the quality requirements of the Lur Brand Act it may lose its right to export. The lur is specifically Danish, a magnificently wrought wind instrument of the Bronze Age. Several well-preserved specimens have been recovered from bogs, always on old Danish territory. The lur was used for summoning people together; some even think that housewives blew it to announce that meals were ready. These

Danish cheese-making is highly mechanized

hardly consisted of cheese, but of oysters fish, and venison.

When did cheese obtain a place on the menu in Denmark? Arable farming and animal husbandry grew in importance with the introduction of Christianity and monasticism. The monks actually opposed heavy meat-eating, and dairy products gradually made headway. In the Middle Ages it became customary for the manors and large farms to make their own butter and cheese, but only for their own consumption and under primitive conditions.

About a hundred years ago an almost legendary figure appeared on the scene, a Mrs. Hanne Nielsen from Havarthigård near Copenhagen. This bluff farmer's wife is in many respects the mother of Danish cheese-making. Though knowing little of foreign languages, she travelled about Europe in order to study foreign cheese-making on the spot. She saw Cheddar made in England, visited the Edam and Gouda cheese-making centres of Holland, penetrated into the Roquefort caves in France, and climbed the Swiss Alps where Emmenthaler is produced. She brought home all the recipes, copied the cheeses, and became purveyor to the Royal Court. This pioneer also taught thousands of pupils.

Over Twenty Kinds

In the period after Hanne Nielsen, when Cooperative dairies sprang up all over the country, an original cheese industry was gradually developed, with its own individuality, different from the models. The savoury Danish Blue (Danablu) is quite different from Roquefort, the Danish Samso with the nutty flavour different altogether from Emmenthaler, and so on. The Danish industry now makes over twenty varieties of cheese, some for all tastes; and it is continually experimenting in laboratories and dairies to improve the quality and make it as uniform as possible. Regular judgings and exhibitions are held at which the experts take stock.

The Danish industry produces special anti-tropical cheeses for export to hot countries. It also makes rind-less cheeses, sliced cheese in cellophane, cheese spreads attractively packaged. The outstanding members of the Danish cheese family include the circular, firm Samso, the easy-to-cut rectangular Danbo, the mild Fynbo, the semi-firm Havarti with the slightly acid flavour, named after the pioneering Hanne Nielsen of Havarthigård; others are Tybo, Elbo, Esrom, the flat cylinder-shaped Maribo with the many irregular holes, the round red Molbo, the blue-veined Danablu and its

usin the spicier Mycella, besides Danish amembert, Danish Emmenthaler, Dash Brie, etc. A fine and full-bodied unch that has won friends far and wide.

World Contacts

The industry has its Cheese Export oard, a coordinating body which lays own the general lines of export policy, e actual marketing, except in the case f centralized sales to, say, Government uthorities, being carried out by a number f authorized exporters with agents and ontacts all over the world. It is easy to et into touch with Danish cheese salesnen. Danish cheeses have become good mbassadors of Denmark.

In the United States Danish Blue has ad a good name for some years and is egarded as something extra special, the ame being the case in Canada. To back ales to these countries an information nd publicity service is carried out, from n office in New York, which strikes many chords. In 1960, increased efforts ave been made to establish the solid Danish cheeses in the rich North Amerian market, and a special campaign is eing conducted by means of newspaper dvertising and other publicity. A conderable quantity of Danish cheese is lso marketed in Central and South America, a particularly good market here being Venezuela, which in 1959 ook about 2,700 tons, against 600 tons in 955.

The largest customer in Europe, and he world, is West Germany, with imorts in 1959 of about 41,000 tons, or ver 50 per cent of the total Danish exorts. Italy, where many people appreciate cheese with all sorts of meals, is lso a considerable importer of Danish heese, especially the mild Samso. In Belgium, the Danish industry is conducting in 1960 a big campaign of window displays throughout the country, the background being an export of 1,400 tons n 1959. Affected by the drought of 1959, France, herself a cheese-making country, imported large amounts of Danish cheese, totalling just under 2,000 tons. There, too, the most popular variety is Samso. The Mediterranean countries Algeria, Tunis, Morocco, Egypt, etc.—are regular importers of Danish cheese; and so one could go on....

Success Binding

The Danish cheese family has achieved international success, but the producers know that success is binding. The quality must be maintained and raised, and the customer must have what he likes.

Worker making slide rules

Rulers and Set Squares

By Kristen Hesselager

A Danish engineer began in his spare time to make templates for geometrical work. Later he opened a workshop, and now he has a factory which produces drawing articles for about 70 different countries

The cycling tour of a young student of engineering in 1921 turned out to be the beginning of a flourishing business that today exports to 70 countries. The student required some templates for his geometrical figures. They were necessary for students then as they are now, but there was a shortage of them. At the time, they were made only by a model maker. The ones in question were a 150-year-old set known as Copenhagen ship curves.

When the young man had made his purchase he found that he could in his spare time relieve the shortage and earn an honest penny while doing so. Using primitive tools, he began to make them in a corner of his room and sell them to his fellow-students.

Encouraging Award

When employed later as a qualified engineer in the drawing office of a large Copenhagen firm, he continued his spare-time production with the help of a file and a knife. In 1933 he gained the diploma of the Industrial Association followed by a prize award, and this encouraged him to start his own business. The engineer, whose name is F. Duelund Nielsen, built himself a villa and installed a workshop in the cellar. A few years later he was able to erect a small suburban factory; this has been several times extended, and new additions now being built will increase the present area by 70 per cent. The business now employs 60–70 persons.

The production comprises several thousand different articles. The original templates consist of 41 different designs. They are all used in shipbuilding, and every draughtsman employs some of them. The former student supplies all those that are used at the Technical University.

The factory also produces general and students' geometry set-squares, nautical protractors and parallel rulers, heavy-gauge and scale rulers, tracing rulers and railway curves, electro-templates for miscellaneous electrical constructions, bow and nut templates, and many other articles. The latest production is a hatcher, so designed that by pressing a button the ruler is made to jump back a little, thus enabling parallel lines to be drawn at a fixed distance. It is adjustable to any measurement between 0.7 mm and 3 cm. A picture of the appliance in a folder led immediately to orders covering several months of production.

There are special sets of English, American, and German curves. Whether the material is used in the construction of earth satellites is unknown, but at least it is employed at the Danish atomic research station at Risø; and a Danish engineering firm which built the railways of Iran and is now constructing roads there has obtained large sets of curves for road construction, each composed of 50–60 individual curves. Various scale rulers have been made for scientific tests in wind tunnels. The technical college at Aachen in Germany uses several thousand curves a year for a special construction. Measuring appliances are being produced for an American professor, who has invented a form of drawing instrument for use in axonometric delineation—a kind of perspective drawing to produce a sketch figuratively.

Ordinary School Use

These are only random examples, and usually the firm is not told about the purpose for which the general products are required. But not only scientific and other advanced objects are served. Large quantities of articles are supplied for ordinary school use, and big shipments of these are made to America, where firms specializing in drawing articles are known to have abandoned their own output of certain lines and instead—despite the customs duties—now buy the finished articles from the Danish factory. Some sales are made to wholesale dealers, who deliver to American school stores. Rulers and set-squares have also been supplied to the United Nations, for use in technically under-developed countries.

What, it may be asked, is the secret of this success? In the first place, exceptional demands are made on the materials. Some years ago, the factory stopped using celluloid, which in the course of a few years becomes discoloured and warps with dampness, besides which a 30 cm-long ruler can shrink in a few months by 3 mm. The factory has to a wide extent employed the synthetic material acryl, a white homogeneous material that is extremely durable and flexible and is remarkable for being non-inflammable. Before the war, acryl was so costly that its use was confined almost entirely to professional draughtsman, engineers, and architects; but by means of fully automatic and semi-automatic methods the firm has succeeded in establishing a mass production of articles of a uniformly high standard, thereby cheapening production.

Precision a Necessity

Quite recently, an altogether new material has been employed; one with the good qualities of acryl, but even stronger. It is called polycarbonate, or macrolon, and it can withstand 130 degrees Centigrade of heat and 190 degrees of cold without becoming brittle. The factory is believed to be the first in the world to use this material for drawing articles.

Next, manufacture is meticulously precise. A ruler scaled for use in drawing offices must have extremely fine divisions, and the firm uses as a prototype a glass ruler, made in Switzerland, which is graduated in tenths of a millimetre with an accuracy of a thousandth of a millimetre. This standard ruler, a direct descendant of the original standard metre in Paris, is employed for adjusting the automatic divider. A knife on this machine scores the graduations, one at a time on several rulers simultaneously. For the sake of accuracy, the temperature in the factory rooms is kept at 20 degrees Centigrade (68° F) all the year round; and though there are lower warehouse temperatures, the graduations are never made until the right temperature is reached.

Precision is a 'must' in measuring instruments

SIDELIGHTS ON DENMARK

oyal Voyage to Greenland

King Frederik and Queen Ingrid will sit Greenland in July, together with the eir to the Throne, Princess Margrethe.

Honour for Professor Aage Bohr

Professor Aage Bohr, a son of Professor iels Bohr, has been presented in Wash-gton with the annual Dannie Heineman ize for mathematical physics. The pre-ntation was made by the president of e society, Dr. Victor Weisskopf, who ns studied at the Copenhagen University stitute for Theoretical Physics. Professor Weisskopf said of Professor Aage Bohr's ientific work that his theses had given w life to nuclear physics and established ne basis for a new line of research.

The Finsen Memorial Congress

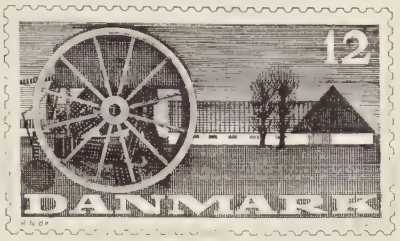
The International Committee for hotobiology will hold its third world ongress, from July 31 to August 5, 1960, n Copenhagen, in memory of the Danish r. Niels Finsen, founder of photo-nerapy, the centenary of whose birth lls on December 15 this year. King rederik is the patron of the Finsen Memorial Congress and Professor Niels ohr is honorary president. Dr. Finsen, vho was already a sick man when he was warded the Nobel Prize, died at the ge of 43.

Rally by Danish-Canadians

Like the Danish-Americans, who gather very year at Rebild National Park in utland, Danish-Canadians now have heir meeting place at Strandbygård, ear Faxe Ladeplads, South Zealand. The irst rally takes place on Dominion Day, uly 1, this year. Arrangements for it were made by a group of sponsors, and include ceremony commemorating the Danish Captain Jens Munk, who was sent out by Christian IV (1588–1648) to discover the North-west Passage and winter in Hud-on's Bay.

First American Tourist

Mr. Lester Tomley, a farmer from Wisconsin, was the first of 100,000 American tourists to receive the summer's porcelain badge from the committee of "Denmark in the U.S.A.". Mr. Tomley and his family were received at Copen-hagen airport by the Prime Minister, Mr. Viggo Kampmann. The party proceeded to the Tivoli, where the family lunched with Mr. Kampmann, Mr. Svend Acker, head of the tourist association, and others.



A New Set of Stamps

The Danish General Post Office has issued three special stamps with agricultural designs. They are the first stamps to be issued by Denmark in a special size, and the first with occupational designs.

Food in U. S. "Danish Year"

The forthcoming "Danish Year" in the United States will take in Danish food, which is much appreciated in America also.

The arrangements, scheduled to begin in the autumn, will include a display of Danish applied arts. This will be opened by King Frederik at the Metropolitan Museum of Art in New York, and will also be seen in Chicago, San Francisco, and Dallas. It is planned to have restaurant facilities, in order that visitors to the show may see—and especially taste—specialized Danish foods.

Sugar Machinery Exports

Exports of sugar machinery by the Danish Sugar Refineries have attained considerable dimensions in connection with the continuous diffusion method now being employed in many countries. Last year 22 plants were installed, and many more contracts have been obtained since.

The Burning of Njal's Farm

Investigations by the laboratory of the National Museum in Copenhagen have now established that the burning of Njal's farm, Bergtorsvall, took place about the year 1000, which tallies with the saga.

A year ago the National Museum received a piece of charcoal which members of the staff of the Icelandic National Museum had unearthed on the presumed site of Njal's farm. The dating was made by means of radioactive carbon C14, which gives measurements correct to a hundred years. Historical sources suggest that the fire took place in 1011.

Opening of Polar Hotel

In the presence of prominent representatives of American, Greenlandic, and Danish authorities, the Royal Greenland Board of Trade, and the Scandinavian Airlines System, the northernmost Danish hotel and air station has been opened at Søndre Strømfjord in South-west Greenland. The new hotel and station building is one of the most remarkable projects ever undertaken by Denmark in the Arctic. The entire building is faced with aluminium and has a closed passage to shelter passengers entering and leaving the aircraft.

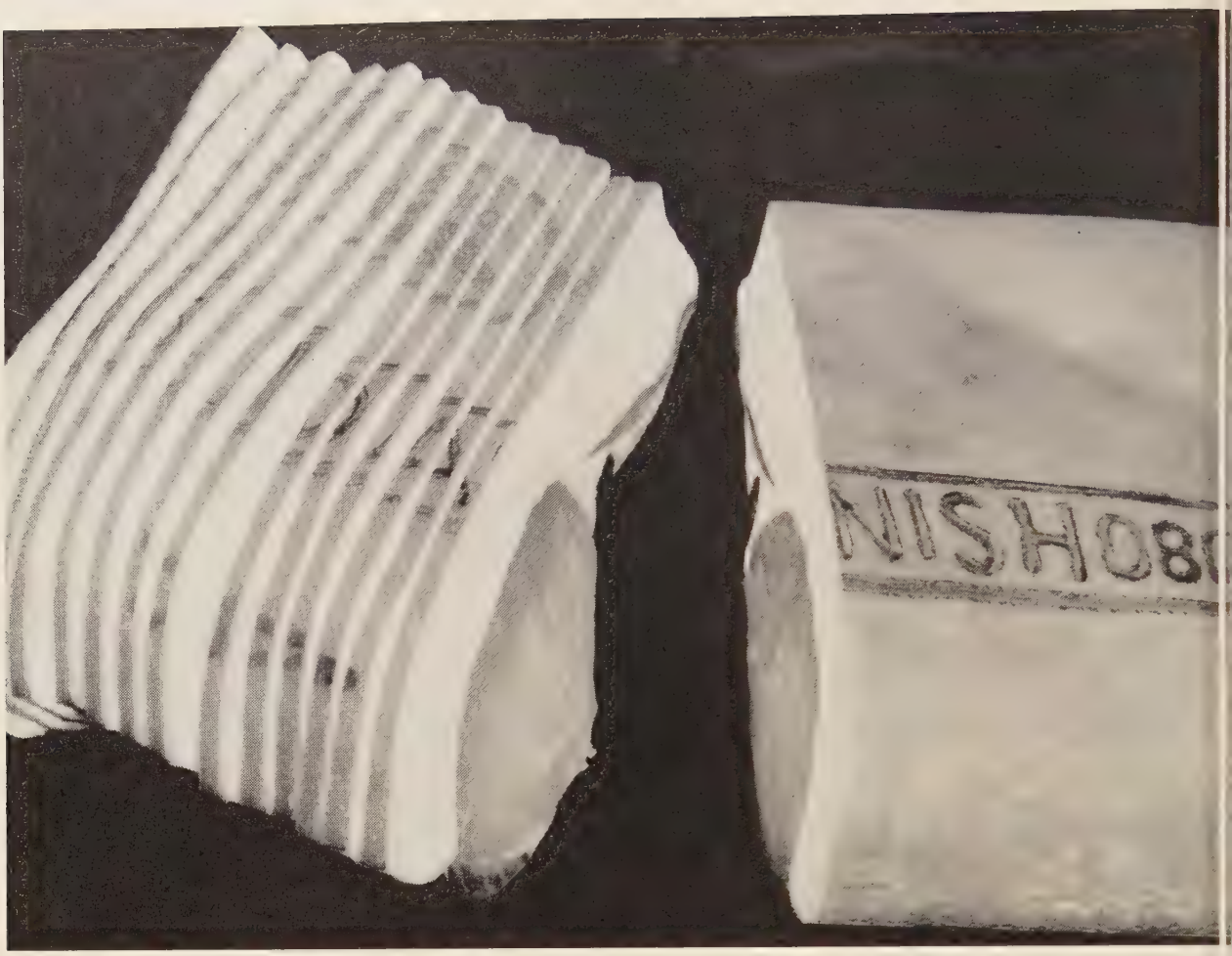
Kierkegaard Memorials

In view of the growing international reputation of Søren Kierkegaard, it is fitting that anything which can contribute to our knowledge of the Danish philosopher should be collected and preserved. A special Kierkegaard room, containing manuscripts and former belongings of Kierkegaard, was recently opened in the Copenhagen City Museum. The collection is arranged, case by case, so as to illustrate Kierkegaard's development as man and author.

Among the objects in the commemorative room are a rosewood cabinet in which he kept copies of his printed works to the memory of his fiancée, Regine Olsen. There is a special case devoted to Kierkegaard's relations with Hans Christian Andersen; relations which were never cordial, the two men being so different, and yet mutually linked.

Tablets of Cream

Cream in tablet form looks like becoming a big new Danish export line. It was introduced at this year's Food Fear in Ålborg, and there will be an annual production of 100 tons, or 20 million tablets. The inventor is Mr. H. S. Brøchner, for some years manager of Canada's largest dairy at Calgary, Alberta, who has taken out 45 dairy patents. The tablets will be chiefly of use in hot countries where cream is not easy to keep.



This is what stripe-marked bacon looks like. The stripes are one inch apart and the patches are clearly visible on rashers

The Bacon's Stripes

By Knud Ravnkilde

Since 1958 it has been the practice in Denmark to brand each side of bacon with two stripes, running down its whole length. When the bacon is sliced the stripes leave the two patches that are seen on the edge of the rashers

Two small patches about an inch apart, seen on the edge of each rasher of bacon on millions of British breakfast tables every morning, are the unobtrusive but important evidence of the latest big advance in Danish bacon production.

Quite simply, the patches are there to tell the consumer that the bacon is really Danish.

A pattern of two intertwined lurs, the ancient Danish musical instruments, has been for half a century the quality mark of all butter, bacon, and cheese exported from Denmark. The Lurmark has stood its test and will not be dropped. But in the case of bacon it has the drawback that it is lost when the sides of bacon are cut into rashers. Thus it could only be a guarantee to the tradesman; the consumer had no proof that his bacon was Danish.

The problem troubled the bacon factories for many years, until after innumerable experiments they found the solution. From the autumn of 1958, each side of bacon was branded with two stripes enclosing the word 'Danish' and the number of the bacon factory, and running down the whole of the side. These two stripes give, when the bacon is sliced, the two patches that are clearly visible on the edge of the bacon. On most rashers, fragments of the word 'Danish' or the factory number can also be seen, but it is the two extremities and their relative distance that are the housewife's guarantee of origin.

Bacon Identified

British consumers were not slow in catching on to the idea. A few months after the branding had been introduced under the slogan 'The mark's on every rasher . . . the flavour's in every bite', the Danish Agricultural Producers' Information Service in London, the advanced publicity post of Danish farmers in Britain, made a survey of the results. It showed that 35 per cent of all housewives and 48 per cent of all purchasers of Danish bacon already identified it by the marking.

An indirect but more palpable proof of the importance of the marking is the expansion in sales which took place in 1959, and to which the stripes undoubtedly contributed. Owing to high market prices of pork in Britain the domestic production of bacon fell sharply, and the Danish share in the weekly sales of bacon rose from 4,100–4,200 tons to over 5,000 tons, in a total of 10,000–11,000 tons. This big increase might have meant that Denmark had scraped the barrel, and failing to maintain the high quality had shipped a certain amount of bacon which was below the export standard. Yet on the contrary the popularity of Danish bacon rose in relation to its competitors It could always be sold when bacon from other countries remained unsold, and whenever prices fell it was chiefly because difficulties in disposing of other bacon depressed the market as a whole.

It was an extremely fortunate time for increased demands from Denmark. In 1959, Danish pig production achieved a new record, with 8,500,000 pigs killed against 6,500,000 three years before.

Slight of Lean

Just when the striped marking was about to be introduced, and production rose disturbingly, a phenomenon known as 'slight of lean' became a serious problem. 'Slight of lean' means that there is not enough flesh under the back fat, a fault which can occur even when the back measurements are as they should be, and which was first discovered when the side of bacon was cut. 'Slight of lean' is and has for many years been a big problem in every pig-keeping country, but is perhaps particularly noticeable in the case of Denmark. Here we have succeeded in greatly reducing the thickness of back fat—in test pigs it is now about an inch, compared with an average of an inch and a quarter 20 years ago—and it goes without saying that a deficiency of lean meat is more apparent with a thinner layer of fat.

It was obvious that it would not be possible to proceed with the stripe marking, this being a fresh promise of quality in every rasher, without disposing of 'slight of lean' at the same time.

A Hard Task

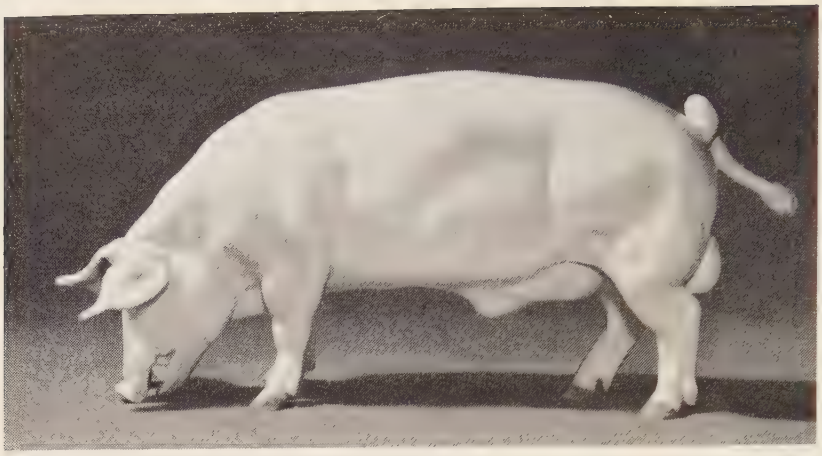
The agricultural industry was equipped for the difficult campaign and took radical measures, with swift success. There is only one breed in Denmark, Danish Landrace (a few farmers keep Large Whites), and breeding is so well organized that it can quickly be influenced in a desired direction. The nucleus of production is formed by the 250 breeding centres; that is, farms with outstandingly good pigs which are kept under constant control.

The progeny from these centres are tested at four testing stations under exactly identical conditions, and when they are killed it can be established whether the heredity of the parents is good or bad. Breeding stock are selected on this basis, the country's 62 cooperative bacon factories buying station boars which are available to their members. The farmers buy sows or boars from the breeding centres, and so it is not long before the qualities of the best breeding stock benefit all producers.

In selecting breeding stock particular attention was paid to 'slight of lean', and as luck would have it better aid had become available, in the form of a new device for measuring the fat layer on live pigs by means of ultrasonic waves. It was no longer necessary to kill a pig to find out its value. Furthermore, the Bacon Factories Research Institute, founded and maintained by the cooperative bacon factories and 16 commercial bacon factories, devised a measuring stick, which when thrust into a side of bacon is able to show whether in an apparantly fine side there is concealed 'slight of lean'.

Also, the quality grading was tightened up, the maximum thickness of back fat

The Danish Landrace is probably the world's most inoffensive breed



A Typical Boar

This boar, *Jens Most*, is one of the aristocrats of the Danish Landrace breed. Born on July 25, 1956, he can trace his pedigree back through more than 25 generations. Amongst his ancestors are many prominent breeding animals such as Kæmpeornen Jumbo (Giant boar Jumbo) born 1895.

Although not without minor faults of figure, he is nevertheless a very typical representative of his breed. He has been awarded many top prizes at shows, culminating with the championship at the big Bellahøj Show held in Copenhagen in 1958.

By experts he is described as follows: A very typical boar of average size and length. Head, ears, neck and jowl very light. Shoulder light, firm and well set. Strong but a slightly uneven back. Hindquarters long, broad, straight-sided with full, deep and well-developed hams. The underline straight. Legs strong, and well set. Fourteen teats.

In Denmark a limited number of farms (approx. 260) are authorized as breeding centres, with national picked stock. Jens Most has been approved for breeding at the Allingbjerggård centre, owned by Mr. H. N. Nielsen. Some of Jens Most's progeny are licensed at other breeding centres, and three groups of them have been tested with excellent results at the National Progeny Testing Station.

In numerous visits to the farm where he is kept, the sculptor Helen Schou has caught this Danish Landrace boar to the life.

permissible in Grade One being reduced and the weight of bacon pigs still further limited.

Finally, all farmers received a circularized booklet giving directions for feeding and management based on the latest scientific advances, and specially designed with a view to reducing the incidence of 'slight of lean' to an absolute minimum.

Other farmers often think that feeding is the secret of Danish pig production. They are right in a way; for though there is no secret about it, few can copy it. Briefly, the feed consists of 1.5 to 3 kg (3.3–6.6 lb) of skim-milk a day and as much barley as the pig can eat, plus the supplementary vitamins and minerals which every farmer feeds to his stock.

The real secret of success is that only Danish farmers can feed their pigs on skim-milk, because other countries do not have the same mixed farming. In no other country is the average farm based on so many different complementary products. Without his cattle herd, which is chiefly fed from his own harvest, the farmer would not be able to keep the fairly cheap skim-milk in his troughs. You can manage without skim-milk—but then production ceases to be cheap and simple, and the uniformly high quality required for a quality marking so thorough as the stripes on Danish bacon cannot be achieved.

Which means that the recipe for the two patches should really begin: Take a country's agriculture and reorganize it on Danish lines....

DANISH FOREIGN OFFICE JOURNAL

Published by the Ministry of Foreign Affairs. Distributed through Denmark's Diplomatic and Consular representatives to interested firms, trade associations, authorities, the Press, etc.

RESPONSIBLE EDITOR:
CHIEF OF THE PRESS DEPARTMENT OF THE MINISTRY OF FOREIGN AFFAIRS
Christiansborg, Copenhagen K.

ADVERTISEMENTS:
DANSK BLADFORLAG,
Amaliegade 22, Copenhagen K.

PRINTERS:
J. H. SCHULTZ A/S, UNIVERSITETS-BOGTRYKKERI, COPENHAGEN

SUBSCRIPTIONS:
J. H. SCHULTZ BOGHANDEL,
Havnegade 15, Copenhagen K.

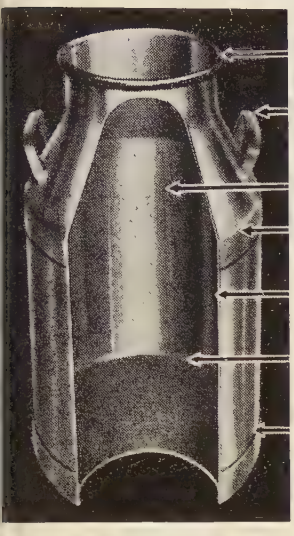
Price Kr. 8 a year post-free, issued quarterly. Single copies Kr. 2.50.
All correspondence regarding subscriptions to be addressed to:

J. H. Schultz Boghandel, Havnegade 15, Copenhagen K.

THE DANISH

Alminette

SEAMLESS MILK CHURN OF HARDENED ALUMINIUM



Solid rounded bead.

Hardened non-protruding handles.

Mirror finish inside.

Re-inforced shoulder.

Heavy gauge body.

Streamlined throughout.

Solid base of galvanized steel or hardened aluminium.

FREDERIKSBERG METALVAREFABRIK Ltd.

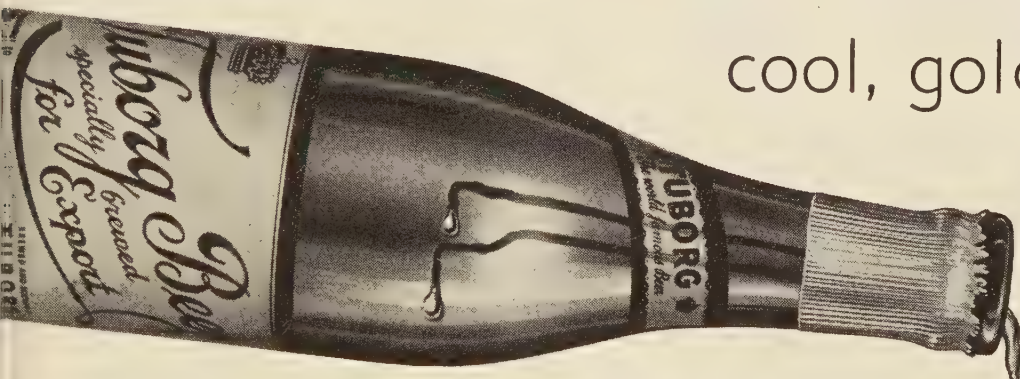
10 NITIVEJ - COPENHAGEN F

Phone : Central 2326 - Cables : Seamless

AALBORG AKVAVIT

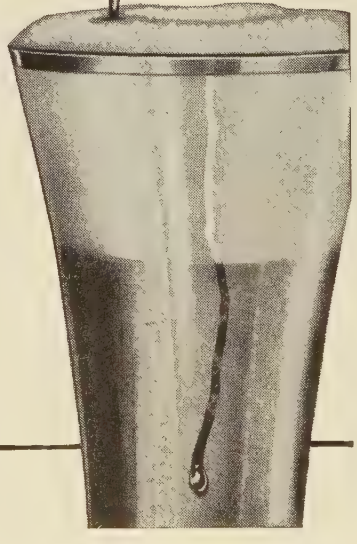
SOLE EXPORTERS:
DANISCO LTD.
COPENHAGEN

cool, golden...



A Royal Choice

All over the world, people of judgment ask for Tuborg—that wonderful, wonderful beer from wonderful, wonderful Copenhagen. So, wherever you are, enjoy cool, golden Tuborg. Skål!



TUBORG

THE WORLD FAMOUS BEER

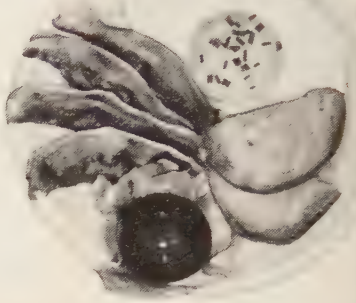
By appointment to

THE ROYAL DANISH COURT THE ROYAL SWEDISH COURT THE ROYAL GREEK COURT

Tuborg Breweries Ltd., Copenhagen

DANISH DANISH DANISH DANISH DANISH DANISH DANISH DAN

bacon



- a magic word where
food is the topic of conversation.
So many fine
meals can be conjured up
with *Danish bacon,*
from the finest delicacy
to the everyday -
'bacon and egg' -
enjoyed throughout
the world but
even more appetising
with *Danish bacon.*

bacon makes a meal

If you look at even the thinnest rasher of **Danish bacon** *you will notice two marks an inch apart. These are part of the two lines that enclose the word DANISH down the whole of each side. Look for the marks when you buy* **Danish bacon,** *you can be sure it is bacon fit for a king.*

The Danish Bacon Factories' Export Association, Axelborg, Copenhagen V.

EXPORT

of all sorts of

DANISH CHEESE

Our best known sorts are:

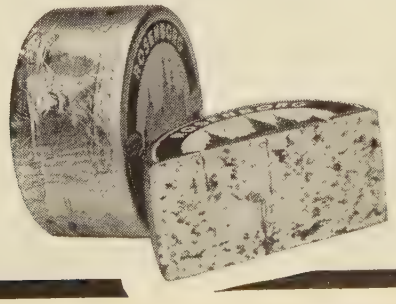
DOFO

HADERSLEV

DENMARK

Co-operative sales organization for more than 100 Danish dairies.

Oldest Danish Producers of Blue Cheese



BOEL FOODS

1, KAMPMANNSGADE, COPENHAGEN . DENMARK

TELEGRAMS: BOELBROS . TELEX 2965

Producers and exporters of all kinds of Danish cheese

MYHRWOLD & RASMUSSEN

74, KOBBELVÆNGET, COPENHAGEN BRH.
DENMARK

★

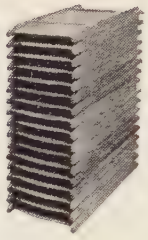
We are pump manufacturers
We are pump experts

The ROTAN pump

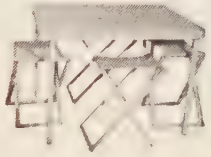
Suitable for:
Oil
Fat
Tar
Petrol
Lard
Beer
Brine
Molasses etc.

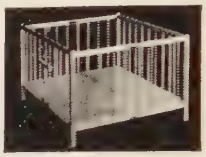
Tell us your problems,
and we will solve them
and give a keen quotation.

Model 33



Model 34





Spring Clothes-pegs of Wood and Plastics
"Handy" Wooden Folding-Chairs
Deck-chairs Play-pens Picnic Sets

C. C. HANSEN LTD.
ROSKILDE - DENMARK
Cables: Hansens

NAKSKOV SKIBSVÆRFT

(NAKSKOV SHIPYARD LTD.)
NAKSKOV · DENMARK
SHIPBUILDERS · SHIPREPAIRERS

M/T PRIMERO

20.600 TONS D. W.
built for A/S IVARANS REDERI
OSLO

The Tiger from Denmark

gives your wireless full strength . . .

If you're hunting for a really reliable battery for your battery set, then ask for Hellesens. It's a battery with an exceptionally long life and always has the same high quality. It was Hellesens who invented the dry cell 72 years ago, and today no less than 70 % of the production is exported to 103 countries.

Insist on the wireless battery with the tiger on it!

HELLESENS LTD.

6, ALDERSROGADE, COPENHAGEN Ø, DENMARK

LEO PHARMACEUTICAL PRODUCTS · BALLERUP · DENMARK

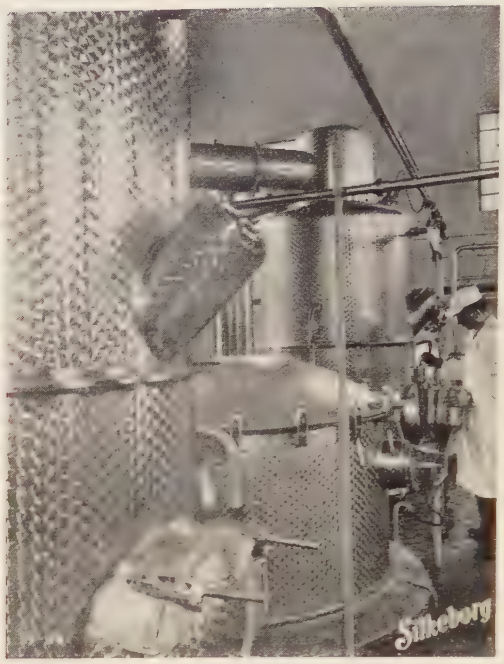
Hormones
Antibiotics
Enzymes
Vitamins
Synthetics
Heparin

L E O

FACTORIES AND AGENCIES IN 81 COUNTRIES

COHR *Silver*

CARL M. COHR - FREDERICIA - DENMARK



SILKEBORG supplies complete dairy plants as well as plants for the manufacture of evaporated milk, sweetened, condensed milk, drum-dried powder and spray-dried powder.
SILKEBORG has more than a 100 years' experience in the manufacture of dairy machines.

SILKEBORG MASKINFABRIK A/S
SILKEBORG DENMARK

·DFM·

DE FORENEDE MASKINFABRIKKER

NAKSKOV

DENMARK

MODERN

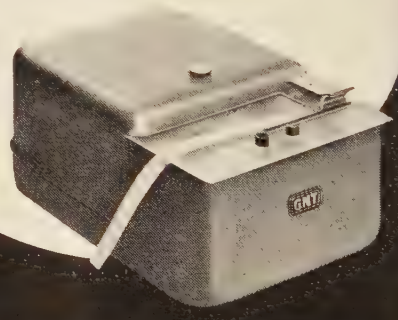
Steam WINCHES
WARPING WINCHES
WINDLASSES
CAPSTANS
TRAWLER WINCHES
STEERING GEAR
CARGO-PUMPS

Electrically DRIVEN
PISTON PUMPS

Morseinker for training purposes

TELEGRAPH INSTRUMENTS

5-unit tape transmitter



GREAT NORTHERN TELEGRAPH WORKS
4, Sydhavns Plads, Copenhagen SV, Denmark

SPECIAL EXPORT ADVERTISEMENTS

AGRICULTURAL PRODUCE

•ANSK FLØDE EXPORT
stablished 1912 *16, Grønløkkevej, Odense*
xporters of evaporated milk and tinned cream

THE DANISH BACON-FACTORIES' EXPORT ASSOCIATION
AXELBORG — COPENHAGEN V
Exporters of bacon, canned meat etc.

Skive Cheese Factory
BØRGE HANSEN, *Skive . Denmark*
Telegrams: OSTEHANSEN
TELEX 9111
Export of all sorts of cheese
Manufacture of processed cheese

RASMUS HANSEN LTD.
9, Syndergaardsgade, Copenhagen V.
Telegrams: RASHA, Copenhagen
Exporters and Manufacturers of Fancy Cheese Butter & Milk-powder
Specialities:
Danish Blue Cheese, Esrom,
Danish Camembert, Samsoe, Fynbo.
Maribo, Danish Emmenthaler
Service and Quality

P. M. PLUM EXPORT CO. LTD.
1, H. C. Andersens Boulevard, Copenhagen V
Danish Tinned Hams and Provisions
Choicest Danish Butter in tins, casks and packets

MAYPOLE, Copenhagen V.
Telegrams: MAYPOLE - Telex: 2395
BUTTER - CHEESE - MILK -
CANNED MEAT

SEED AND GRAIN

Dansk Saasæd- & Kornexport A/S
Nykøbing F.
Telegrams: SEEDGRAIN
Telex No. 2728
Telephone 85.27.22
Distributors of:
Original Abed Pedigree Seed Grain
Original Weibull Pedigree Seed Grain
Original Pajbjerg Pedigree Seed Grain
Exporters of Seed Grain and Malting Barley

FR. DREYER A/S
Wholesale Seed Merchant and Seed Grower
Aarhus . Denmark

A. NIELSEN & Co. A/S
Nykøbing F.
Telegrams: NESLEINA
Telex No. 2728
Telephone 85.27.22
Seed grain — Malting barley — Grain

NIELSEN & SMITH LTD. Dansk Saasæd Kompagni
14, Nyropsgade Copenhagen
Telegrams: JUBYCORN
Telephone: Minerva 3858
Telex: 2397.
Sole agents in Denmark for the Svalöf Plant-Breeding Station.
Exporters of Seed Grain and Malting Barley

A/S C. A. QVADE & CO.,
Maribo
Telegrams: QVADE
Telex: 5969
Telephone: Maribo 121
Exporters of Malting Barley and Seed Grain
Sole agents for:
ORIGINAL CARLSBERG II BARLEY

FRUIT & VEGETABLES

Gartnernes Salgsforening *Odense*
Telegrams: GASA, ODENSE
Telephone: Odense 12 60 00
Telex: 9833
Horticultural Producers' Marketing Assn.
Exporters of Vegetables, Fruits and Flowers

KØBENHAVNS FRUGTAUKTIONER
VEGETABLES . POTATOES . FRUIT
7, RØMERSGADE . COPENHAGEN
Telegrams: SUBASTA . Phone: Central 12420
Telex: 5794

PREPARED FOODSTUFFS etc.

AALBORG AKVAVIT
CLOC LIQUEURS
CLOC GIN CLOC WHISKY CLOC VODKA
Sole exporters:
AKTIESELSKABET DANISCO
Copenhagen

JENSEN & MØLLER LTD.
39, Ved Amagerbanen, Copenhagen S.
BISCUITS AND WAFERS
Cable Add.: BICHOKO

MINERAL PRODUCTS

DANISH WHITING DENMARK
AALBORG KRIDTSLEMMERI
M. KRAGELUNDS FABRIKKER.
Finest Danish Whiting
Cable: KRAGELUND. Aalborg

DANSK FLINT-EXPORT
Copenhagen - Telegrams: FLINTEXPORT
Flint pebbles, boulder flint, crushed flint, ground feldspar & quartz lining blocks for tube mills
Flint

MORSØ KRIDTVÆRK
Erslev-Mors. Tlgrs. KRIMO, Nykøbing M.
Exporters of whiting.

THE OYTA-COMPANY Ltd.
Holbæk . Tlgrs.: HOTACO
Crushed Oyster Shell for poultry food

MACHINERY METAL GOODS

DANISH WELDER COMPANY
HANS L. LARSEN & SON
COPENHAGEN N . DENMARK
Manufacturers of:
Gasoline and Diesel driven DC arc welders - Transformer type arc welders - Electric motor driven DC arc welders - Spot welders - Seam and Butt flash welders - Accessories for electric welding.

DANSK TRYKLUFT KOMPAGNI A/S,
31, Nürnberggade, Copenhagen S.
Cables: Datryko
DTK Cement Injectors - DTK Sandblast Plants and Compressors.
DTK Pneumatic Cement guns.

BRØDR.GRAM A/S . VOJENS
Refrigerating plants for every purpose
Complete ice-cream plants in all sizes
Telegrams: REFRIGRAM. Telephone: Vojens 41421

H. Hollesens Fabrikker
Copenhagen SV . Denmark
"GOLF" RADIATORS AND PUMPS

DRY-CLEANING PLANTS. LAUNDRY MACHINERY
Georg E. Mathiasen Ltd.
COPENHAGEN

SPECIAL EXPORT ADVERTISEMENTS

LAUNDRY & DRY-CLEANING MACHINERY, GARMENT PRESSES

NORVA
MASKINFABRIK A-S

Copenhagen NV. - Telegr.: NORVAFABRIK

PEDERSHAAB MASKINFABRIK Ltd.
BRØNDERSLEV . DENMARK

Road-making machines, paving-machines, all classes of road-rollers

---

STEEL BOILERS
OIL BURNERS
MECHANICAL STOKERS

RECK'S OPVARMNINGS COMP. A/S
Cables: ARECK Copenhagen N

OIL PUMPS & MACHINE EQUIPMENT
OLIEPUMPER & MASKINUDSTYR

Nordic Petroleum and Commercial Company Ltd.
6, Vester Farimagsgade - Copenhagen V.
Tel.: Byen 4309 Cable: Exolein

DAIRY MACHINERY
AND BREWERY MACHINERY

Dairy Machinery
De danske Mejeriers Maskinfabrik A.m.b.A.
KOLDING DENMARK
Established 1888 Telegrams: Mejerifabrik

Jensen & Andersen *Dairy Engineers*
23, SYDMARKEN, SØBORG, COPENHAGEN
Complete plants for condensing, sterilizing and homogenizing . Churn-washing Machines
Machines for filling, seaming & washing tins

RANNIE DAIRY MACHINERY

Homogenisers
THE WORLD-FAMOUS
HOMO-MIC
Milk Bottle Plants
RANNIE MACHINE WORKS
TYCHO BRAHES ALLE 35 COPENHAGEN S

DAIRY MACHINERY

SILKEBORG dairy machines have more than 100 years' experience behind them, and are preferred by experts all over the world.

SILKEBORG MASKINFABRIK A/S
Silkeborg 8 — Denmark

TECHNICO-CHEMICAL
INDUSTRY

I/S ALGADAN, *Frederikshavn*
Manufacturers of AGAR-AGAR, in strips and powdered
Telegrams: Algadan

THE VEJLE ALBUMEN FACTORY LTD.
Vejle - Denmark
Manufacturers of Blood Albumen and Soluble Dried Blood of superior quality

---

Chr. Hansens Laboratorium Ltd.
3, Sct. Annæplads . Copenhagen K
Manufacturers of all Dairy Preparations. Awarded 175 First Prizes at International Exhibitions.
Famed for Strength, Uniformity, and Purity

ENZYMES
TRYPSIN and AMYLASE in pure, homogeneous and stable form, accurately standardized for the manufacture of bate, desizing products etc., and READY-MADE DESIZING PRODUCTS for the textile industry

NOVO INDUSTRI A/S

115, FUGLEBAKKEVEJ, COPENHAGEN N

REYMANN & LOEVENGREEN
6, Gl. Kongevej, Copenhagen V.
DAIRY PREPARATIONS
Gold Medals: Rio 1923 . Milan 1924
Paris 1926 . Mantua 1926 . Grand Prix Barcelona 1930 . Brussels 1935

MEDICINAL
PRODUCTS

Antibiotics	Hormones	Enzymes
Vitamins	Heparin	Alkaloids
Synthetics		

LEO PHARMACEUTICAL PRODUCTS
Copenhagen — Denmark

INSULIN
PENICILLIN
STREPTOMYCIN
TRYPSIN
HEPARIN
CATGUT

NOVO INDUSTRI A/S
115, Fuglebakkevej, Copenhagen N

ENGINEERING

Harbour construction, bridge building, railways, dams **HØJGAARD & SCHULTZ A/S**
9, Ewaldsgade, Copenhagen N

MONBERG & THORSEN, Ltd.
2, Kultorvet . Copenhagen K
Bridges . Harbours . Silos . Industrial Buildings . Foundation Work

---

J. G. MOURITZEN & Co. Ltd.
Dredging and Reclaiming
11, N. Voldgade
Copenhagen K
Telegr. Sandsugere

FORWARDING

ADAMS TRANSPORT CO.
Danish Limited Company
Established 1884
Head office: 30, Danasvej, Copenhagen V
Cables: ADAM
International Forwarding, Air freight and Shipping Agents
Packers. Storers. Insurers and Furniture Removers

VARIOUS

A/S Burmeister & Wain's
Maskin- og Skibsbyggeri
Copenhagen K, Denmark
Telegrams: BURMEISTERS
Diesel Engines, Motorships, Steel Castings, Cast-Iron Forgings, Steam-Boiler Plants, Steel Constructions

---

Plastic Raw Materials and Semi-Finished Goods
for the Plastics Industry, for Building Purposes, for Packing Purposes; P. V. C. Plastic Sheeting

DANOKAN
4. Sjeleboderne (Montergaarden.)
Cables: Kahncomp. Telephones: Byen 3090—3099
Copenhagen — Denmark

LABORATORY APPARATUS
FOR
RESEARCH, INDUSTRY & EDUCATION

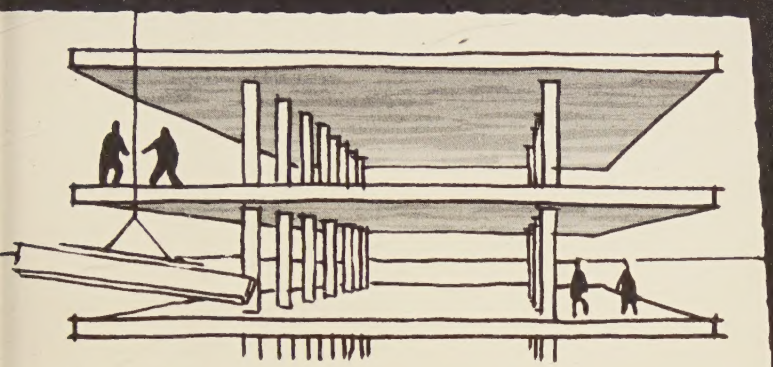
STRUERS

COPENHAGEN TELEGR.: STRUERS

TOROTOR

TOROTOR A/S
Manufacturers of radio and television components
6, Kollegievej, Chl., Copenhagen . Tlgs.: "Torotor"

DANISH CEMENT PRODUCTS
for many uses
-preferred for quality



WHITE PORTLAND CEMENT

- combines strength with dazzling whiteness - for all decorative purposes, e. g. floor and face slabs, front units, artificial stone, rendering, etc.

COLOURED CEMENT

- in 16 light- and lime-fast standard colours - used for decorative purposes, like White Portland Cement.

CEMPEXO WALL PAINT

CEMPEXO

- the Danish cement paint - available in beautiful light- and lime-fast colours besides white; water repellent; will not rub off; inexpensive in use; easy to apply.

PORTLAND CEMENT

in the world-famed Danish quality exceeds the requirements of standard specifications of all principal countries.

RAPID CEMENT

- rapid hardening Portland cement - for concrete work to be completed quickly, for concrete ware, and for concreting in cold weather.

SUPER-RAPID CEMENT

- extra rapidly hardening Portland cement - for urgent concrete jobs, for prestressed concrete and for concreting in cold weather.

HIGH SULPHATE RESISTANT CEMENT

- ASTM Type V Portland Cement - for marine works such as quays, jetties, groins, breakwaters, etc.

LOW-HEAT CEMENT

- Portland cement developing the heat of hydration slowly - for placing of large concrete masses, such as dams.

Export to all parts of the world

A/S DANSK CEMENT CENTRAL

Selling Organisation of
Aktieselskabet AALBORG PORTLAND - CEMENT - FABRIK
Telephone: Central 5696
Telegrams: Cementcentral - Teleprinter: 2330
28 CHRISTIANS BRYGGE - COPENHAGEN V - DENMARK

Klit

DANSK CEMENT CENTRAL

ALEX SECHER